

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: P295556

Luminaire Tested: **14RLN-LD5-40-UNV-L83050-W2A1-U-4500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P295556
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-L83050-W2A1-U-4500K
Description: RLN LED 1x4 TUNABLE WHITE TROFFER
WITH STANDARD LENS
Light Source: (168) 80 CRI LEDS TUNED TO 4500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4300.0 lumens
Efficiency: N/A
Efficacy: 103.9 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

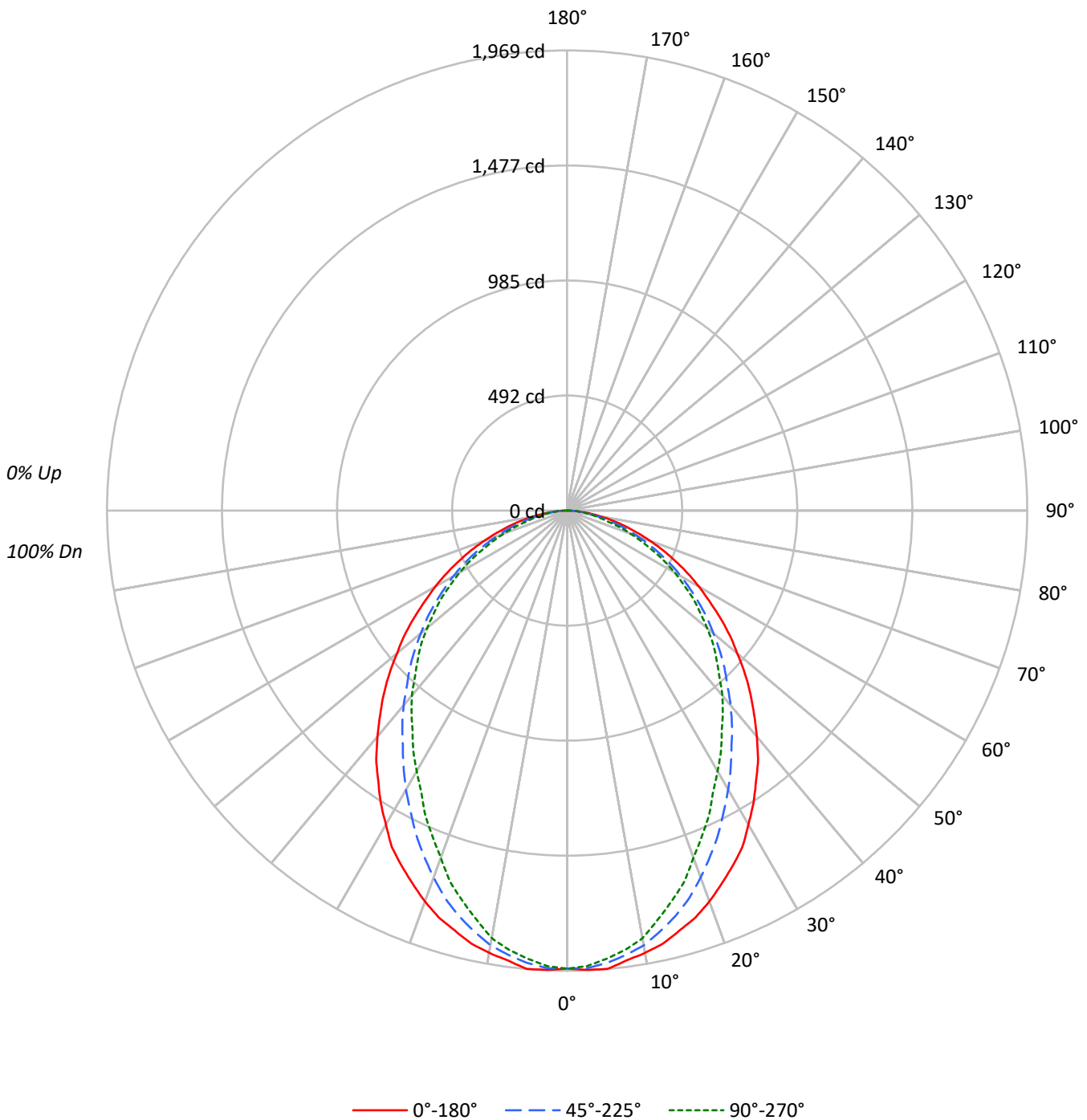
Input Watts (W): 41.385
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	5274	5274	5274
5°	5318	5250	5201
10°	5251	5161	5077
15°	5182	4999	4817
20°	5097	4785	4525
25°	4978	4541	4266
30°	4820	4284	4001
35°	4630	4028	3789
40°	4434	3822	3631
45°	4223	3622	3442
50°	3977	3422	3270
55°	3750	3230	3093
60°	3509	3030	2864
65°	3250	2798	2567
70°	2958	2515	2272
75°	2663	2247	1851
80°	2280	1830	1745
85°	1849	1738	1738



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	183.5	4.3
10°-20°	503.6	11.7
20°-30°	706.8	16.4
30°-40°	784.0	18.2
40°-50°	752.6	17.5
50°-60°	630.8	14.7
60°-70°	442.8	10.3
70°-80°	231.2	5.4
80°-90°	64.7	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°	1394.0	32.4
0°-40°	2177.9	50.6
0°-60°	3561.3	82.8
0°-90°	4300.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4300.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1960	1960	1960	1960	1960	
5°	1969	1943	1943	1931	1925	186
15°	1860	1827	1794	1747	1729	525
25°	1676	1616	1529	1455	1437	772
35°	1409	1331	1226	1166	1153	883
45°	1110	1024	952	915	904	855
55°	799	739	688	667	659	715
65°	510	476	440	412	403	507
75°	256	236	216	191	178	271
85°	60	56	56	56	56	71
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1959.8	1959.8	1959.8	1959.8	1959.8
2.5°	1967.0	1956.1	1959.8	1959.8	1950.7
5°	1968.8	1943.4	1943.4	1930.7	1925.3
7.5°	1941.6	1921.6	1918.0	1901.6	1896.2
10°	1921.6	1901.6	1888.9	1867.1	1858.1
12.5°	1898.0	1867.1	1843.5	1807.2	1792.7
15°	1859.9	1827.2	1794.5	1747.3	1729.1
17.5°	1825.4	1787.2	1738.2	1685.5	1665.5
20°	1780.0	1734.5	1671.0	1598.3	1580.2
22.5°	1727.3	1674.6	1600.1	1522.0	1507.5
25°	1676.4	1616.5	1529.3	1454.8	1436.7
27.5°	1623.8	1551.1	1451.2	1371.3	1353.1
30°	1551.1	1476.6	1378.6	1300.5	1287.7
32.5°	1483.9	1409.4	1302.3	1238.7	1224.2
35°	1409.4	1331.3	1226.0	1166.1	1153.3
37.5°	1342.2	1251.4	1158.8	1100.7	1093.4
40°	1262.3	1180.6	1088.0	1044.4	1033.5
42.5°	1184.2	1102.5	1015.3	977.2	964.4
45°	1109.7	1024.4	951.7	915.4	904.5
47.5°	1031.6	953.5	884.5	855.5	848.2
50°	949.9	880.9	817.3	790.1	781.0
52.5°	877.3	806.4	753.8	728.3	717.4
55°	799.2	739.2	688.4	666.6	659.3
57.5°	721.1	672.0	623.0	603.0	592.1
60°	652.0	603.0	563.0	539.4	532.2
62.5°	581.2	539.4	501.3	479.5	470.4
65°	510.4	475.9	439.5	412.3	403.2
67.5°	445.0	406.8	377.8	354.2	345.1
70°	376.0	348.7	319.7	297.9	288.8
72.5°	312.4	292.4	267.0	243.4	234.3
75°	256.1	236.1	216.1	190.7	178.0
77.5°	199.8	187.1	167.1	145.3	145.3
80°	147.1	139.9	118.1	114.4	112.6
82.5°	101.7	98.1	85.4	83.5	83.5
85°	59.9	56.3	56.3	56.3	56.3
87.5°	25.4	27.2	29.1	29.1	30.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)