

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: P295598

Luminaire Tested: **14RLN-LD5-40-UNV-L82765-W2A1-U-4500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P295598
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-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: 4121.0 lumens
Efficiency: N/A
Efficacy: 102.6 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

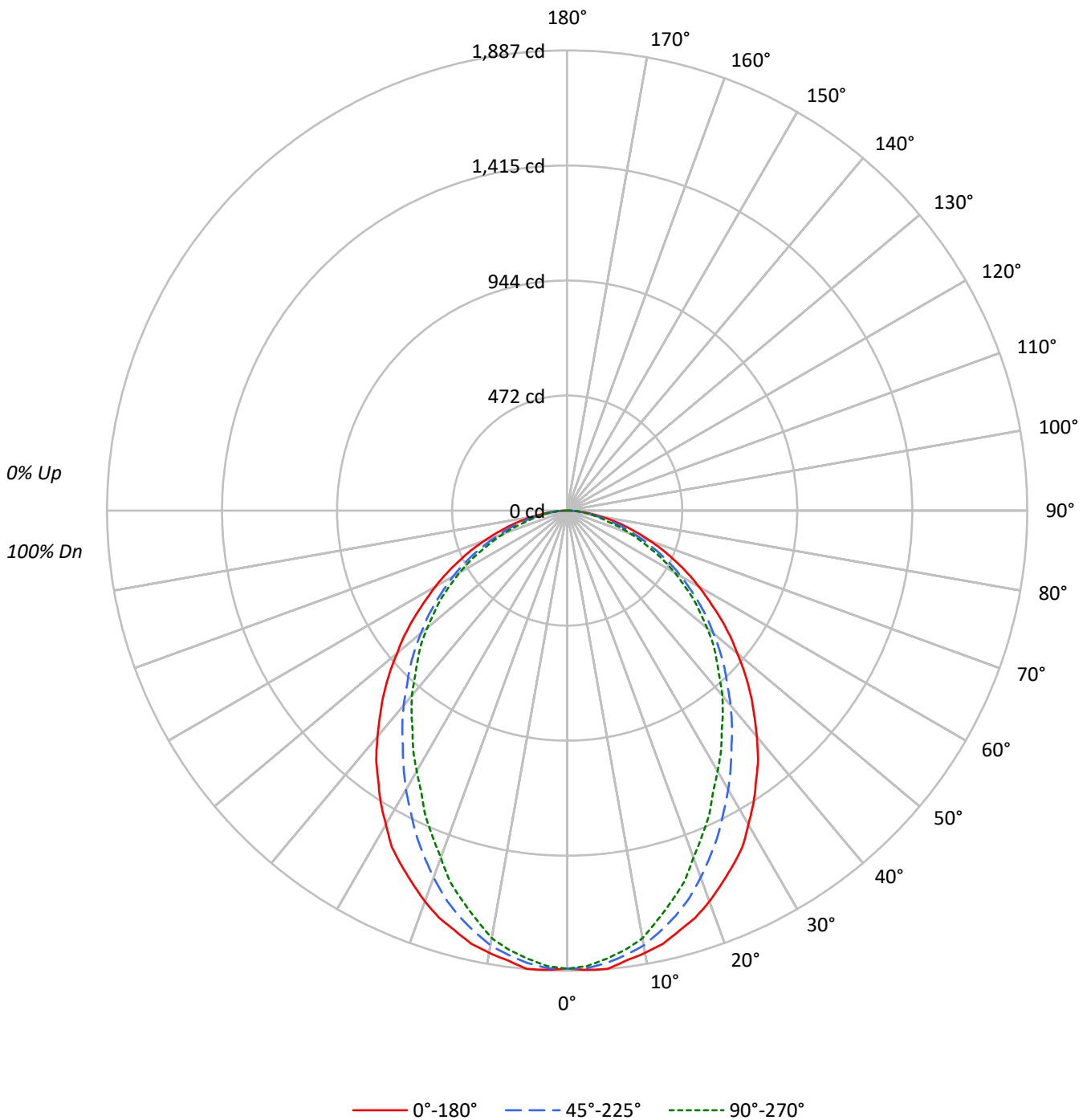
Input Watts (W): 40.176
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5054	5054	5054
5°	5097	5031	4984
10°	5032	4947	4866
15°	4966	4791	4617
20°	4885	4586	4337
25°	4770	4352	4088
30°	4619	4105	3835
35°	4437	3860	3631
40°	4250	3663	3479
45°	4048	3471	3299
50°	3811	3279	3134
55°	3593	3095	2965
60°	3363	2904	2745
65°	3114	2682	2460
70°	2835	2411	2178
75°	2551	2153	1774
80°	2185	1753	1672
85°	1772	1667	1667



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	175.9	4.3
10°-20°	482.7	11.7
20°-30°	677.4	16.4
30°-40°	751.3	18.2
40°-50°	721.3	17.5
50°-60°	604.5	14.7
60°-70°	424.3	10.3
70°-80°	221.6	5.4
80°-90°	62.0	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°	1335.9	32.4
0°-40°	2087.3	50.6
0°-60°	3413.1	82.8
0°-90°	4121.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4121.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1878	1878	1878	1878	1878	
5°	1887	1862	1862	1850	1845	178
15°	1782	1751	1720	1674	1657	503
25°	1607	1549	1466	1394	1377	739
35°	1351	1276	1175	1118	1105	846
45°	1064	982	912	877	867	819
55°	766	708	660	639	632	685
65°	489	456	421	395	386	486
75°	245	226	207	183	171	260
85°	57	54	54	54	54	68
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1878.2	1878.2	1878.2	1878.2	1878.2
2.5°	1885.1	1874.7	1878.2	1878.2	1869.5
5°	1886.9	1862.5	1862.5	1850.3	1845.1
7.5°	1860.8	1841.6	1838.2	1822.5	1817.3
10°	1841.6	1822.5	1810.3	1789.4	1780.7
12.5°	1819.0	1789.4	1766.8	1732.0	1718.0
15°	1782.4	1751.1	1719.8	1674.5	1657.1
17.5°	1749.4	1712.8	1665.8	1615.3	1596.2
20°	1705.9	1662.3	1601.4	1531.8	1514.4
22.5°	1655.4	1604.9	1533.5	1458.7	1444.8
25°	1606.6	1549.2	1465.6	1394.3	1376.9
27.5°	1556.2	1486.5	1390.8	1314.2	1296.8
30°	1486.5	1415.2	1321.2	1246.3	1234.1
32.5°	1422.1	1350.8	1248.1	1187.1	1173.2
35°	1350.8	1275.9	1175.0	1117.5	1105.3
37.5°	1286.4	1199.3	1110.5	1054.8	1047.9
40°	1209.8	1131.4	1042.7	1000.9	990.4
42.5°	1134.9	1056.6	973.0	936.5	924.3
45°	1063.6	981.7	912.1	877.3	866.9
47.5°	988.7	913.9	847.7	819.9	812.9
50°	910.4	844.2	783.3	757.2	748.5
52.5°	840.7	772.9	722.4	698.0	687.6
55°	765.9	708.5	659.7	638.8	631.9
57.5°	691.0	644.0	597.1	577.9	567.5
60°	624.9	577.9	539.6	517.0	510.0
62.5°	557.0	517.0	480.4	459.5	450.8
65°	489.1	456.1	421.2	395.1	386.4
67.5°	426.5	389.9	362.1	339.4	330.7
70°	360.3	334.2	306.4	285.5	276.8
72.5°	299.4	280.2	255.9	233.3	224.5
75°	245.4	226.3	207.1	182.8	170.6
77.5°	191.5	179.3	160.1	139.3	139.3
80°	141.0	134.0	113.1	109.7	107.9
82.5°	97.5	94.0	81.8	80.1	80.1
85°	57.4	54.0	54.0	54.0	54.0
87.5°	24.4	26.1	27.9	27.9	29.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)