

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: P295624

Luminaire Tested: **14RLN-LD5-40-UNV-L93050-W2A1-U-3500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P295624
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-L93050-W2A1-U-3500K
Description: RLN LED 1x4 TUNABLE WHITE TROFFER
WITH STANDARD LENS
Light Source: (168) 90 CRI LEDS TUNED TO 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3448.0 lumens
Efficiency: N/A
Efficacy: 85.8 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

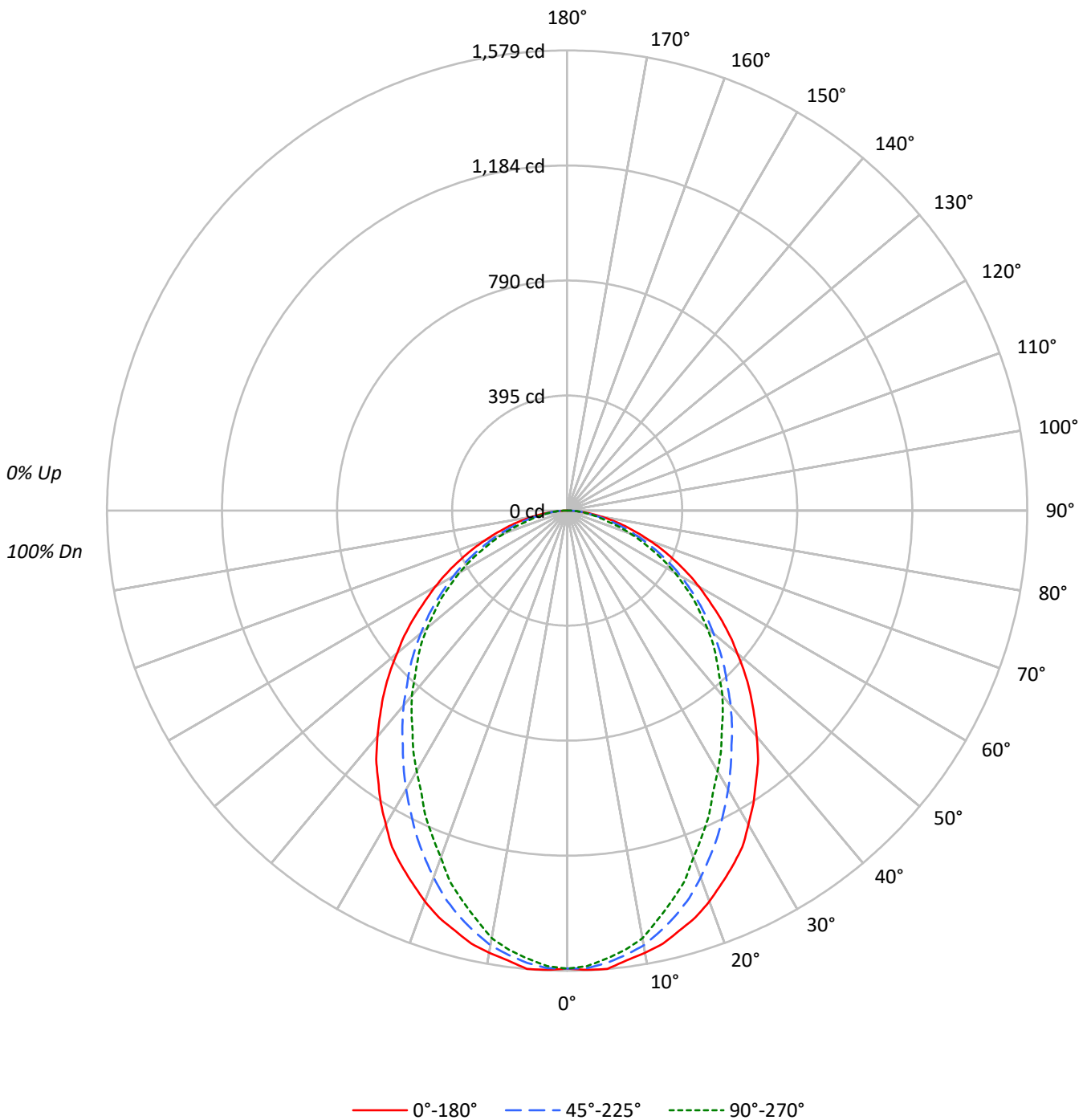
Input Watts (W): 40.176
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	4229	4229	4229
5°	4264	4210	4170
10°	4210	4139	4071
15°	4155	4009	3863
20°	4087	3837	3629
25°	3991	3641	3420
30°	3865	3435	3209
35°	3713	3230	3038
40°	3556	3065	2911
45°	3387	2904	2760
50°	3189	2744	2622
55°	3006	2590	2480
60°	2814	2430	2296
65°	2606	2244	2059
70°	2372	2017	1822
75°	2136	1802	1484
80°	1829	1468	1399
85°	1485	1392	1392



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	147.1	4.3
10°-20°	403.8	11.7
20°-30°	566.8	16.4
30°-40°	628.7	18.2
40°-50°	603.5	17.5
50°-60°	505.8	14.7
60°-70°	355.0	10.3
70°-80°	185.4	5.4
80°-90°	51.9	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°	1117.8	32.4
0°-40°	1746.4	50.7
0°-60°	2855.7	82.8
0°-90°	3448.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3448.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1572	1572	1572	1572	1572	
5°	1579	1558	1558	1548	1544	149
15°	1491	1465	1439	1401	1386	421
25°	1344	1296	1226	1167	1152	619
35°	1130	1068	983	935	925	708
45°	890	821	763	734	725	685
55°	641	593	552	534	529	573
65°	409	382	352	331	323	407
75°	205	189	173	153	143	218
85°	48	45	45	45	45	57
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1571.5	1571.5	1571.5	1571.5	1571.5
2.5°	1577.3	1568.5	1571.5	1571.5	1564.2
5°	1578.7	1558.4	1558.4	1548.2	1543.8
7.5°	1556.9	1540.9	1538.0	1524.9	1520.5
10°	1540.9	1524.9	1514.7	1497.2	1489.9
12.5°	1521.9	1497.2	1478.3	1449.1	1437.5
15°	1491.4	1465.1	1438.9	1401.1	1386.5
17.5°	1463.7	1433.1	1393.8	1351.5	1335.5
20°	1427.3	1390.9	1339.9	1281.6	1267.1
22.5°	1385.0	1342.8	1283.1	1220.5	1208.8
25°	1344.3	1296.2	1226.3	1166.6	1152.0
27.5°	1302.0	1243.8	1163.7	1099.6	1085.0
30°	1243.8	1184.1	1105.4	1042.8	1032.6
32.5°	1189.9	1130.2	1044.2	993.3	981.6
35°	1130.2	1067.5	983.1	935.0	924.8
37.5°	1076.3	1003.5	929.2	882.6	876.8
40°	1012.2	946.7	872.4	837.4	828.7
42.5°	949.6	884.0	814.1	783.5	773.4
45°	889.9	821.4	763.2	734.0	725.3
47.5°	827.2	764.6	709.3	686.0	680.1
50°	761.7	706.4	655.4	633.5	626.3
52.5°	703.4	646.6	604.4	584.0	575.3
55°	640.8	592.8	552.0	534.5	528.7
57.5°	578.2	538.9	499.5	483.5	474.8
60°	522.8	483.5	451.5	432.6	426.7
62.5°	466.0	432.6	402.0	384.5	377.2
65°	409.2	381.6	352.4	330.6	323.3
67.5°	356.8	326.2	302.9	284.0	276.7
70°	301.5	279.6	256.3	238.9	231.6
72.5°	250.5	234.5	214.1	195.2	187.9
75°	205.4	189.3	173.3	152.9	142.7
77.5°	160.2	150.0	134.0	116.5	116.5
80°	118.0	112.1	94.7	91.8	90.3
82.5°	81.6	78.6	68.5	67.0	67.0
85°	48.1	45.1	45.1	45.1	45.1
87.5°	20.4	21.8	23.3	23.3	24.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)