

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: P295623

Luminaire Tested: **14RLN-LD5-40-UNV-L93050-W2A1-U-3000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P295623
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-3000K
Description: RLN LED 1x4 TUNABLE WHITE TROFFER
WITH STANDARD LENS
Light Source: (168) 90 CRI LEDS TUNED TO 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3156.0 lumens
Efficiency: N/A
Efficacy: 78.2 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

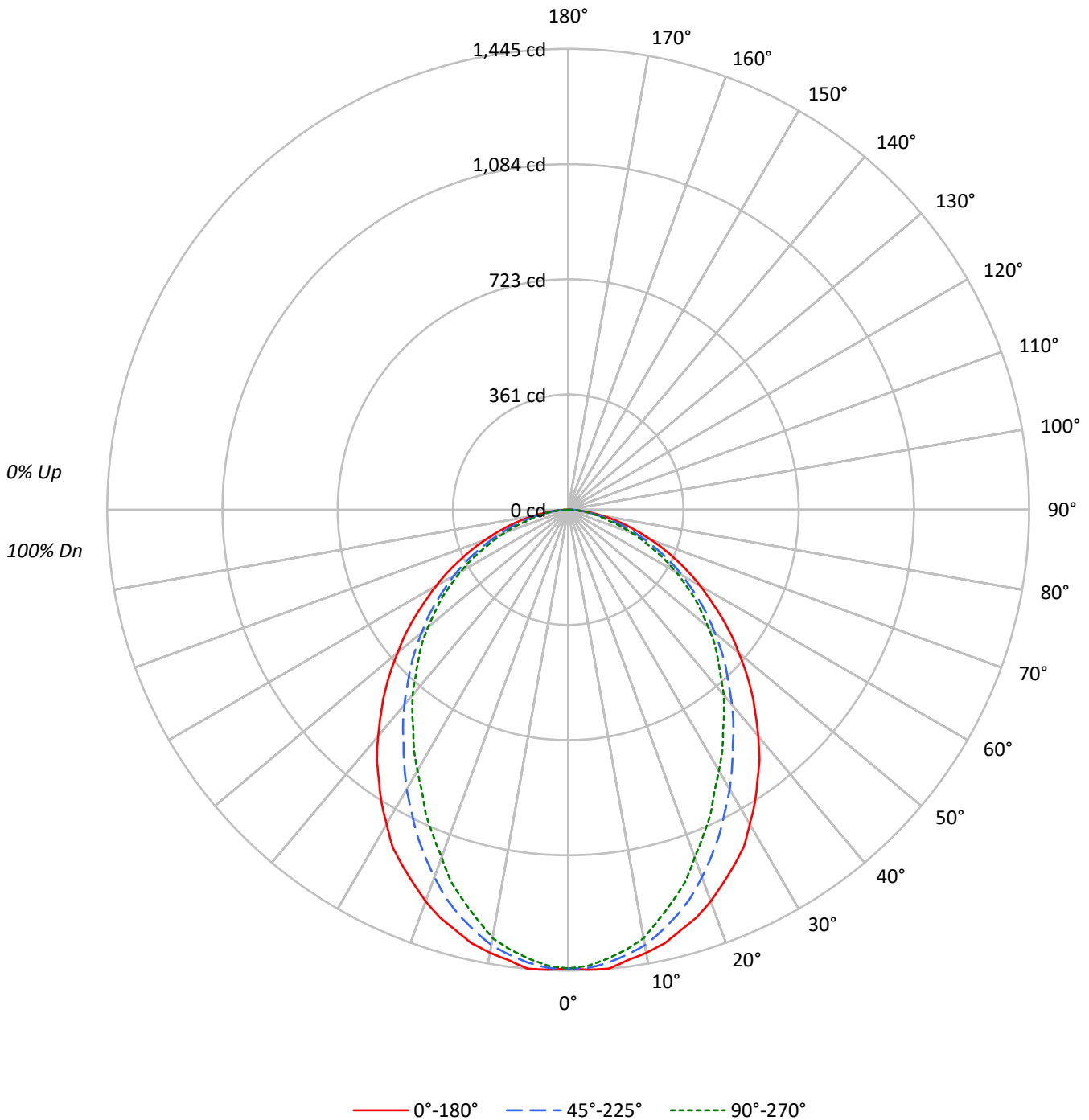
Input Watts (W): 40.362
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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				
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°	3871	3871	3871
5°	3903	3853	3817
10°	3854	3788	3726
15°	3803	3669	3536
20°	3741	3512	3321
25°	3653	3333	3131
30°	3537	3144	2937
35°	3398	2956	2781
40°	3255	2805	2664
45°	3100	2658	2527
50°	2919	2511	2400
55°	2752	2370	2270
60°	2576	2224	2102
65°	2385	2054	1884
70°	2171	1846	1668
75°	1955	1649	1358
80°	1674	1342	1282
85°	1359	1275	1275



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	134.7	4.3
10°-20°	369.6	11.7
20°-30°	518.8	16.4
30°-40°	575.4	18.2
40°-50°	552.4	17.5
50°-60°	463.0	14.7
60°-70°	325.0	10.3
70°-80°	169.7	5.4
80°-90°	47.5	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°	1023.1	32.4
0°-40°	1598.5	50.7
0°-60°	2613.8	82.8
0°-90°	3156.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3156.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1438	1438	1438	1438	1438	
5°	1445	1426	1426	1417	1413	136
15°	1365	1341	1317	1282	1269	385
25°	1230	1186	1122	1068	1054	566
35°	1034	977	900	856	846	648
45°	814	752	698	672	664	627
55°	586	543	505	489	484	525
65°	375	349	323	303	296	372
75°	188	173	159	140	131	199
85°	44	41	41	41	41	52
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1438.4	1438.4	1438.4	1438.4	1438.4
2.5°	1443.7	1435.7	1438.4	1438.4	1431.7
5°	1445.0	1426.4	1426.4	1417.0	1413.1
7.5°	1425.0	1410.4	1407.7	1395.7	1391.7
10°	1410.4	1395.7	1386.4	1370.4	1363.7
12.5°	1393.1	1370.4	1353.1	1326.4	1315.7
15°	1365.1	1341.1	1317.1	1282.4	1269.1
17.5°	1339.7	1311.7	1275.7	1237.1	1222.4
20°	1306.4	1273.1	1226.4	1173.1	1159.8
22.5°	1267.7	1229.1	1174.4	1117.1	1106.4
25°	1230.4	1186.4	1122.4	1067.8	1054.5
27.5°	1191.8	1138.4	1065.1	1006.5	993.1
30°	1138.4	1083.8	1011.8	954.5	945.1
32.5°	1089.1	1034.5	955.8	909.2	898.5
35°	1034.5	977.1	899.8	855.8	846.5
37.5°	985.1	918.5	850.5	807.8	802.5
40°	926.5	866.5	798.5	766.5	758.5
42.5°	869.2	809.2	745.2	717.2	707.9
45°	814.5	751.8	698.5	671.9	663.9
47.5°	757.2	699.9	649.2	627.9	622.5
50°	697.2	646.5	599.9	579.9	573.2
52.5°	643.9	591.9	553.2	534.6	526.6
55°	586.5	542.6	505.2	489.2	483.9
57.5°	529.2	493.2	457.2	442.6	434.6
60°	478.6	442.6	413.3	395.9	390.6
62.5°	426.6	395.9	367.9	351.9	345.3
65°	374.6	349.3	322.6	302.6	295.9
67.5°	326.6	298.6	277.3	259.9	253.3
70°	275.9	255.9	234.6	218.6	212.0
72.5°	229.3	214.6	196.0	178.6	172.0
75°	188.0	173.3	158.6	140.0	130.6
77.5°	146.6	137.3	122.6	106.6	106.6
80°	108.0	102.6	86.6	84.0	82.7
82.5°	74.7	72.0	62.7	61.3	61.3
85°	44.0	41.3	41.3	41.3	41.3
87.5°	18.7	20.0	21.3	21.3	22.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)