

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: P295555

Luminaire Tested: **14RLN-LD5-40-UNV-L83050-W2A1-U-4000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P295555
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-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: 4260.0 lumens
Efficiency: N/A
Efficacy: 105.5 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

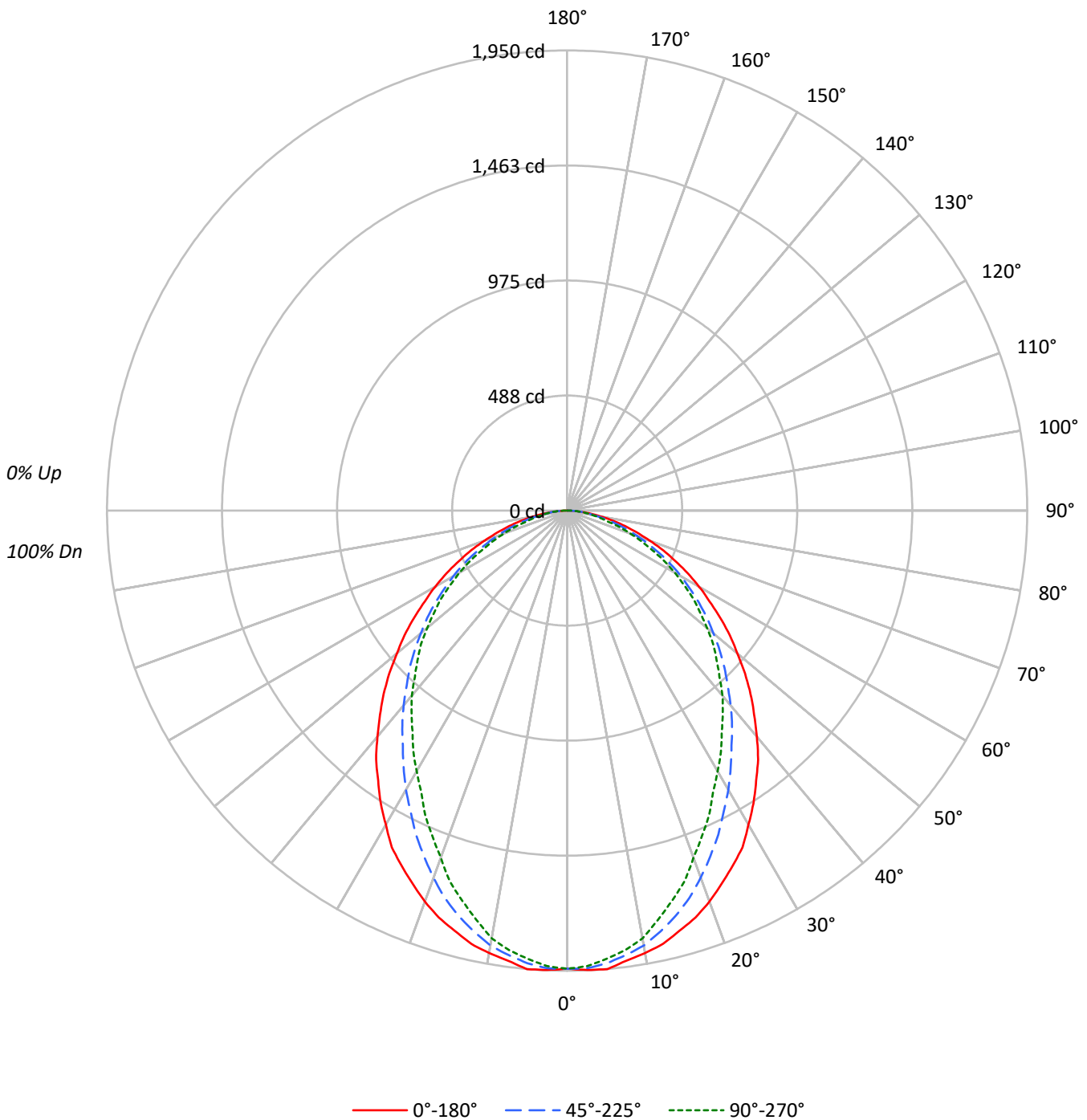
Input Watts (W): 40.362
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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					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°	5225	5225	5225
5°	5269	5201	5152
10°	5202	5114	5030
15°	5133	4953	4772
20°	5050	4741	4483
25°	4931	4499	4226
30°	4775	4244	3964
35°	4587	3990	3754
40°	4393	3786	3597
45°	4184	3588	3410
50°	3940	3390	3239
55°	3714	3200	3065
60°	3477	3002	2837
65°	3219	2773	2544
70°	2931	2492	2251
75°	2638	2226	1833
80°	2259	1813	1729
85°	1834	1723	1723



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	181.8	4.3
10°-20°	498.9	11.7
20°-30°	700.3	16.4
30°-40°	776.7	18.2
40°-50°	745.6	17.5
50°-60°	624.9	14.7
60°-70°	438.6	10.3
70°-80°	229.1	5.4
80°-90°	64.1	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°	1381.0	32.4
0°-40°	2157.7	50.6
0°-60°	3528.2	82.8
0°-90°	4260.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4260.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1942	1942	1942	1942	1942	
5°	1950	1925	1925	1913	1907	184
15°	1843	1810	1778	1731	1713	520
25°	1661	1602	1515	1441	1423	764
35°	1396	1319	1215	1155	1143	874
45°	1099	1015	943	907	896	847
55°	792	732	682	660	653	708
65°	506	471	436	408	400	502
75°	254	234	214	189	176	269
85°	59	56	56	56	56	70
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1941.5	1941.5	1941.5	1941.5	1941.5
2.5°	1948.7	1937.9	1941.5	1941.5	1932.5
5°	1950.5	1925.3	1925.3	1912.7	1907.3
7.5°	1923.5	1903.8	1900.2	1884.0	1878.6
10°	1903.8	1884.0	1871.4	1849.8	1840.8
12.5°	1880.4	1849.8	1826.4	1790.4	1776.0
15°	1842.6	1810.2	1777.8	1731.0	1713.0
17.5°	1808.4	1770.6	1722.0	1669.8	1650.0
20°	1763.4	1718.4	1655.4	1583.5	1565.5
22.5°	1711.2	1659.0	1585.3	1507.9	1493.5
25°	1660.8	1601.5	1515.1	1441.3	1423.3
27.5°	1608.7	1536.7	1437.7	1358.5	1340.5
30°	1536.7	1462.9	1365.7	1288.4	1275.8
32.5°	1470.1	1396.3	1290.2	1227.2	1212.8
35°	1396.3	1318.9	1214.6	1155.2	1142.6
37.5°	1329.7	1239.8	1148.0	1090.4	1083.2
40°	1250.6	1169.6	1077.8	1034.6	1023.9
42.5°	1173.2	1092.2	1005.9	968.1	955.5
45°	1099.4	1014.9	942.9	906.9	896.1
47.5°	1022.1	944.7	876.3	847.5	840.3
50°	941.1	872.7	809.7	782.7	773.7
52.5°	869.1	798.9	746.7	721.6	710.8
55°	791.7	732.4	682.0	660.4	653.2
57.5°	714.4	665.8	617.2	597.4	586.6
60°	646.0	597.4	557.8	534.4	527.2
62.5°	575.8	534.4	496.6	475.0	466.0
65°	505.6	471.4	435.5	408.5	399.5
67.5°	440.8	403.1	374.3	350.9	341.9
70°	372.5	345.5	316.7	295.1	286.1
72.5°	309.5	289.7	264.5	241.1	232.1
75°	253.7	233.9	214.1	188.9	176.3
77.5°	197.9	185.3	165.5	144.0	144.0
80°	145.8	138.6	117.0	113.4	111.6
82.5°	100.8	97.2	84.6	82.8	82.8
85°	59.4	55.8	55.8	55.8	55.8
87.5°	25.2	27.0	28.8	28.8	30.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)