

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: P296168

Luminaire Tested: **24RLN-LD5-42-RDP-UNV-L82765-W2A1-U-5700K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P296168
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P36059-R2)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24RLN-LD5-42-RDP-UNV-L82765-W2A1-U-5700K
Description: RLN LED 2x4 TUNABLE WHITE TROFFER
WITH RDP LENS
Light Source: (504) 80 CRI LEDS TUNED TO 5700K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3643.0 lumens
Efficiency: N/A
Efficacy: 121.7 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.3 / 1.38
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

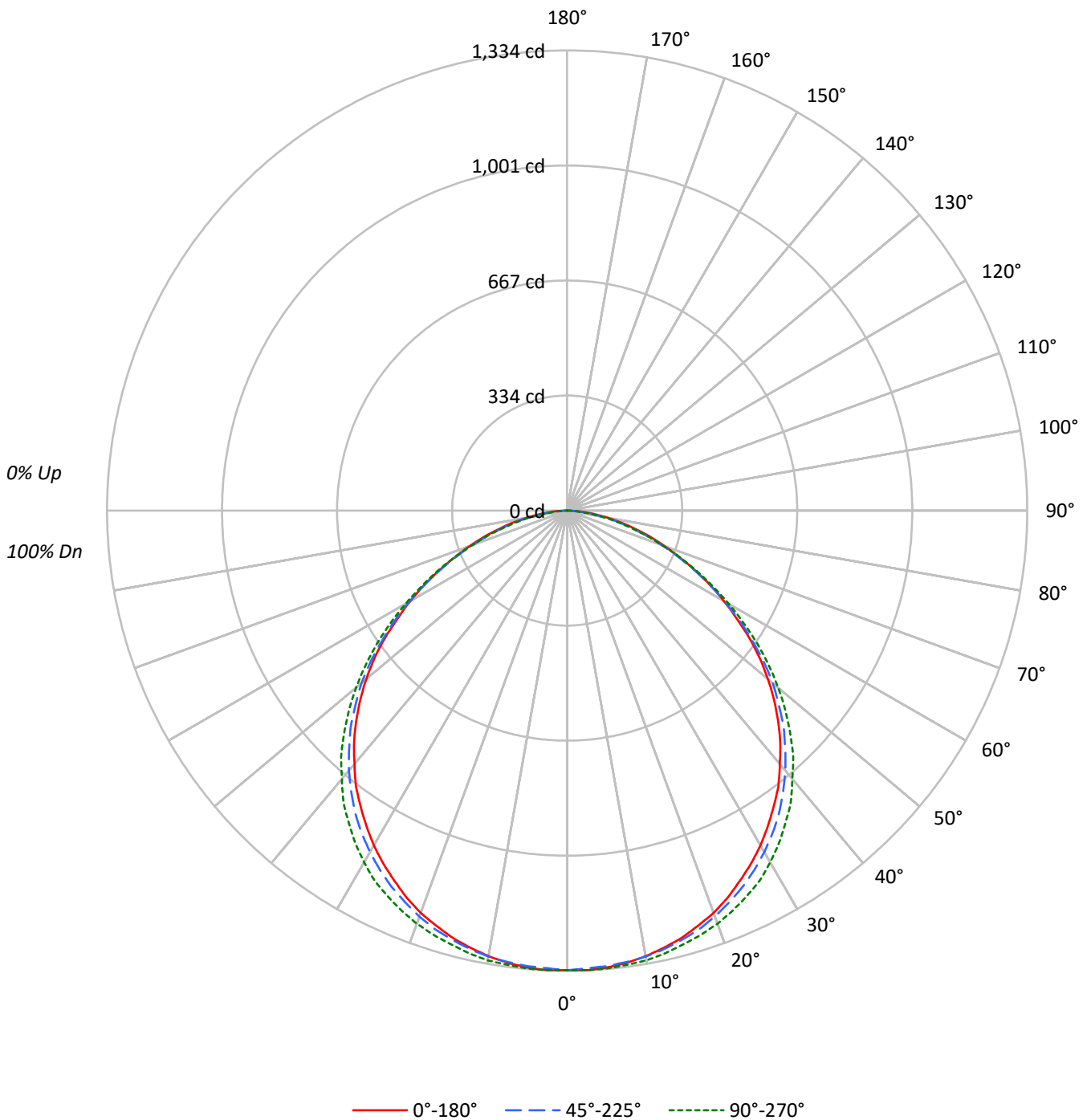
Input Watts (W): 29.946
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	109	105	101	97	107	102	99	95	98	95	92	94	92	90	91	89	87	85					85			
2	100	92	85	80	97	90	84	79	86	81	77	83	79	75	80	77	73	71					71			
3	91	81	73	67	89	79	72	66	76	70	65	74	68	64	71	66	63	60					60			
4	83	72	63	57	81	70	62	56	68	61	55	66	60	55	63	58	54	52					52			
5	77	64	55	49	75	63	55	49	61	54	48	59	53	48	57	52	47	45					45			
6	71	58	49	43	69	57	49	43	55	48	42	53	47	42	52	46	41	39					39			
7	66	52	44	38	64	52	43	38	50	43	37	49	42	37	47	41	37	35					35			
8	61	48	39	34	60	47	39	34	46	39	33	45	38	33	43	37	33	31					31			
9	57	44	36	30	56	43	36	30	42	35	30	41	35	30	40	34	30	28					28			
10	54	41	33	27	52	40	33	27	39	32	27	38	32	27	37	31	27	25					25			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1793	1793	1793
5°	1796	1790	1799
10°	1792	1794	1809
15°	1786	1794	1813
20°	1777	1793	1824
25°	1758	1787	1830
30°	1741	1776	1829
35°	1716	1759	1814
40°	1685	1728	1784
45°	1646	1688	1741
50°	1591	1629	1672
55°	1514	1533	1579
60°	1413	1421	1458
65°	1298	1289	1320
70°	1180	1147	1153
75°	1049	991	984
80°	910	814	793
85°	747	576	448



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	126.3	3.5
10°-20°	364.2	10.0
20°-30°	556.0	15.3
30°-40°	670.3	18.4
40°-50°	683.5	18.8
50°-60°	585.0	16.1
60°-70°	402.9	11.1
70°-80°	206.6	5.7
80°-90°	48.1	1.3
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°	1046.6	28.7
0°-40°	1716.9	47.1
0°-60°	2985.4	81.9
0°-90°	3643.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3643.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1332	1332	1332	1332	1332	
5°	1330	1327	1325	1330	1332	126
15°	1282	1281	1288	1298	1302	362
25°	1184	1188	1204	1224	1233	546
35°	1045	1049	1071	1095	1104	654
45°	865	866	887	909	915	667
55°	645	641	654	668	673	576
65°	408	398	405	408	415	405
75°	202	194	191	191	189	218
85°	48	43	37	33	29	56
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1332.3	1332.3	1332.3	1332.3	1332.3
2.5°	1333.6	1330.9	1328.1	1330.9	1333.6
5°	1329.5	1326.7	1325.3	1329.5	1332.3
7.5°	1322.6	1319.8	1319.8	1325.3	1328.1
10°	1311.5	1310.1	1312.9	1318.4	1324.0
12.5°	1297.7	1297.7	1301.9	1308.8	1314.3
15°	1282.5	1281.1	1288.0	1297.7	1301.9
17.5°	1261.8	1263.2	1272.8	1283.9	1289.4
20°	1241.0	1242.4	1252.1	1267.3	1274.2
22.5°	1214.8	1217.6	1228.6	1248.0	1254.9
25°	1184.4	1188.5	1203.7	1224.5	1232.8
27.5°	1154.0	1158.1	1174.7	1198.2	1209.3
30°	1120.8	1126.3	1142.9	1167.8	1177.5
32.5°	1083.5	1087.6	1108.4	1133.2	1142.9
35°	1044.8	1048.9	1071.1	1094.6	1104.2
37.5°	1006.1	1006.1	1028.2	1055.9	1065.5
40°	959.1	960.5	984.0	1010.3	1015.8
42.5°	914.9	914.9	935.6	960.5	970.2
45°	865.1	866.5	887.3	909.4	914.9
47.5°	814.0	814.0	832.0	852.7	858.2
50°	760.1	757.3	778.1	794.7	798.8
52.5°	704.8	700.7	717.3	731.1	736.6
55°	645.4	641.3	653.7	667.5	673.0
57.5°	583.2	577.7	591.5	603.9	606.7
60°	525.2	516.9	527.9	534.8	541.7
62.5°	467.1	457.4	465.7	469.9	475.4
65°	407.7	398.0	404.9	407.7	414.6
67.5°	351.0	344.1	345.5	349.6	352.4
70°	299.9	291.6	291.6	291.6	293.0
72.5°	252.9	240.5	239.1	240.5	240.5
75°	201.8	193.5	190.7	190.7	189.3
77.5°	161.7	150.6	149.3	146.5	143.7
80°	117.5	107.8	105.0	103.7	102.3
82.5°	81.5	73.2	70.5	67.7	63.6
85°	48.4	42.8	37.3	33.2	29.0
87.5°	18.0	16.6	13.8	12.4	12.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)