

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: P393494

Luminaire Tested: **24EN-LD2-40-UNV-L92765-W2A-1-U (4500K)**

Issue Date: 3/28/2020

Test Information

Test Method: LM-79-08
Report Number: P393494
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-563-33)
Test Lab: INNOVATION CENTER
Issue Date: 3/28/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24EN-LD2-40-UNV-L92765-W2A-1-U (4500K)
Description: 2X4 ENCOUNTER, 4000 LUMENS, VIVIDTUNE TUNABLE WHITE
Light Source: 2700K/6500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3327.6 lumens
Efficiency: N/A
Efficacy: 118.8 lumens/watt
Spacing Criteria (0/90/45): 1.29 / 1.28 / 1.4
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

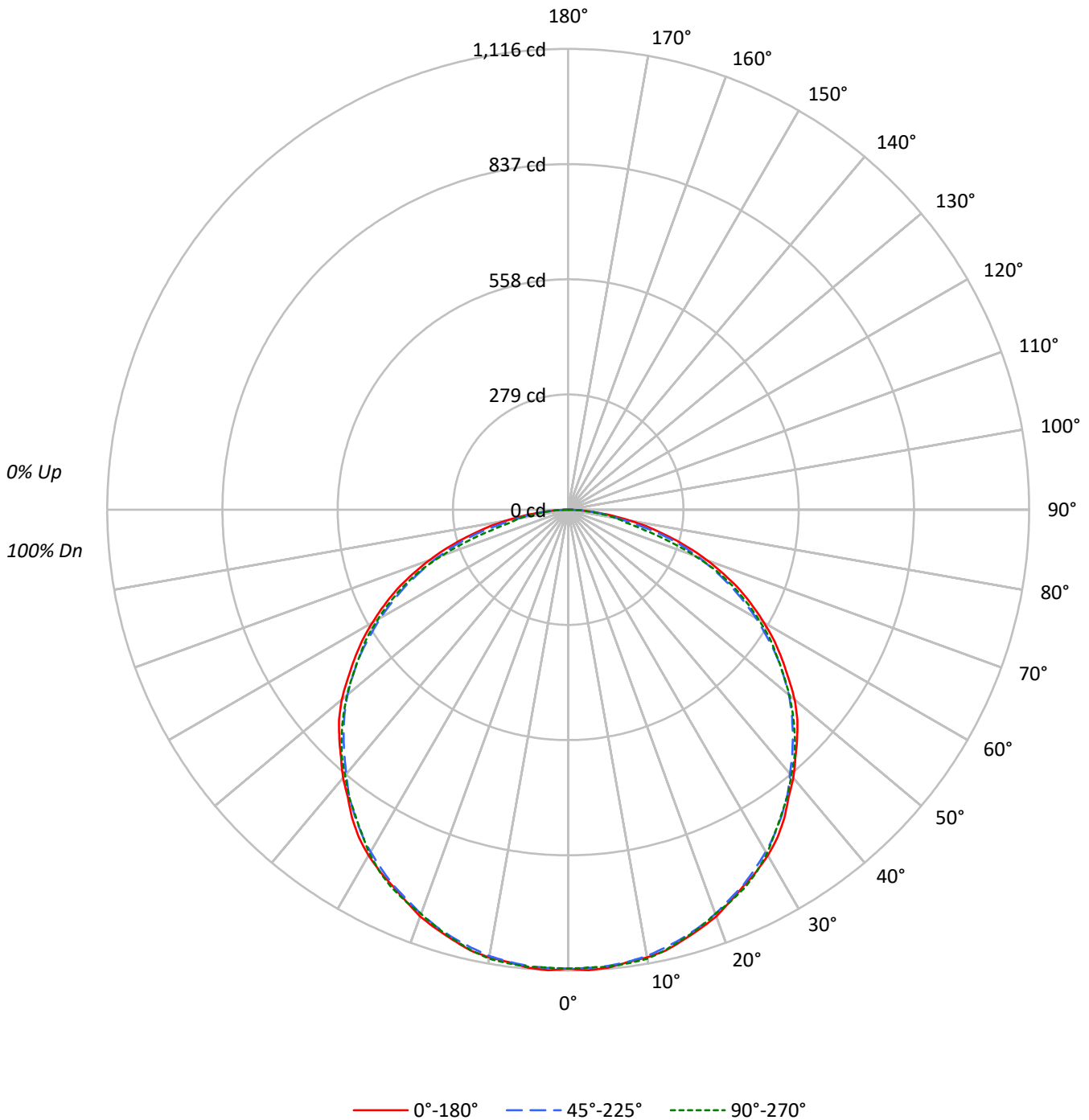
Input Watts (W): 28
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	109	104	99	95	106	101	97	94	97	94	91	93	90	88	90	87	85	83					83			
2	98	90	83	77	96	88	82	76	85	79	74	81	77	73	78	74	71	69					69			
3	90	79	70	64	87	77	69	63	74	68	62	71	66	61	69	64	60	58					58			
4	82	70	61	54	80	68	60	53	66	58	53	63	57	52	61	56	51	49					49			
5	75	62	53	46	73	61	52	46	59	51	45	57	50	45	55	49	44	42					42			
6	69	56	47	40	67	55	46	40	53	45	40	51	44	39	50	44	39	37					37			
7	64	50	42	35	62	50	41	35	48	40	35	47	40	35	45	39	34	32					32			
8	60	46	37	31	58	45	37	31	44	36	31	43	36	31	42	35	31	29					29			
9	56	42	34	28	54	42	34	28	40	33	28	39	33	28	38	32	28	26					26			
10	52	39	31	26	51	38	31	25	37	30	25	36	30	25	36	29	25	23					23			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1496	1496	1496
5°	1503	1498	1500
10°	1504	1499	1508
15°	1502	1496	1499
20°	1501	1491	1491
25°	1493	1489	1500
30°	1502	1487	1495
35°	1498	1482	1479
40°	1489	1467	1476
45°	1491	1463	1477
50°	1498	1460	1463
55°	1482	1443	1445
60°	1472	1412	1435
65°	1459	1373	1404
70°	1406	1315	1280
75°	1315	1226	999
80°	1172	948	936
85°	926	875	786



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	105.5	3.2
10°-20°	303.3	9.1
20°-30°	463.2	13.9
30°-40°	565.1	17.0
40°-50°	596.6	17.9
50°-60°	553.2	16.6
60°-70°	433.4	13.0
70°-80°	242.5	7.3
80°-90°	64.7	1.9
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°	872.0	26.2
0°-40°	1437.1	43.2
0°-60°	2586.9	77.7
0°-90°	3327.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3327.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1112	1112	1112	1112	1112	
5°	1113	1113	1109	1110	1111	106
15°	1079	1074	1074	1071	1076	305
25°	1006	1006	1003	1001	1010	465
35°	912	904	902	901	900	570
45°	784	776	769	767	776	605
55°	632	624	615	615	616	566
65°	458	444	431	434	441	451
75°	253	246	236	205	192	268
85°	60	58	57	53	51	70
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1111.5	1111.5	1111.5	1111.5	1111.5
2.5°	1116.4	1113.9	1110.7	1111.5	1109.8
5°	1113.1	1113.1	1109.0	1109.8	1110.7
7.5°	1104.9	1105.7	1104.1	1100.8	1108.2
10°	1100.8	1095.0	1097.5	1090.9	1104.1
12.5°	1093.4	1084.4	1086.0	1081.1	1091.8
15°	1078.6	1073.7	1073.7	1071.2	1076.2
17.5°	1063.8	1060.5	1058.9	1060.5	1060.5
20°	1048.2	1045.8	1041.6	1044.9	1041.6
22.5°	1026.0	1027.7	1021.1	1028.5	1026.9
25°	1005.5	1005.5	1003.0	1001.4	1010.4
27.5°	987.4	981.7	980.0	976.8	988.3
30°	966.9	956.2	957.0	952.1	962.0
32.5°	942.2	929.9	930.7	925.8	929.9
35°	911.9	903.6	902.0	901.2	900.4
37.5°	876.5	875.7	871.6	874.1	872.4
40°	847.8	846.1	835.5	837.9	840.4
42.5°	814.1	811.6	802.6	804.2	810.8
45°	783.7	776.3	768.9	767.3	776.3
47.5°	752.5	741.0	734.4	729.5	738.5
50°	715.5	705.7	697.4	692.5	699.1
52.5°	672.8	664.6	656.4	654.7	657.2
55°	631.7	623.5	615.3	615.3	616.1
57.5°	592.3	581.6	569.3	571.8	578.3
60°	547.1	537.3	524.9	524.9	533.1
62.5°	502.8	490.4	478.1	479.8	488.0
65°	458.4	444.4	431.3	433.7	441.1
67.5°	407.5	395.1	382.8	386.1	390.2
70°	357.3	345.0	334.3	331.1	325.3
72.5°	306.4	296.6	287.5	269.4	260.4
75°	253.0	245.6	235.8	204.6	192.2
77.5°	203.7	198.0	175.8	147.0	142.9
80°	151.2	151.2	122.4	119.9	120.8
82.5°	102.7	101.0	92.8	87.1	84.6
85°	60.0	57.5	56.7	53.4	50.9
87.5°	19.7	23.0	23.0	22.2	23.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)