

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: P393444

Luminaire Tested: **24EN-LD2-34-UNV-L82765-W2A-1-U (3500K)**

Issue Date: 3/28/2020

Test Information

Test Method: LM-79-08
Report Number: P393444
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-563-32)
Test Lab: INNOVATION CENTER
Issue Date: 3/28/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24EN-LD2-34-UNV-L82765-W2A-1-U (3500K)
Description: 2X4 ENCOUNTER, 3400 LUMENS, VIVIDTUNE TUNABLE WHITE
Light Source: 3000K/5000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3277.6 lumens
Efficiency: N/A
Efficacy: 137.7 lumens/watt
Spacing Criteria (0/90/45): 1.28 / 1.27 / 1.4
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

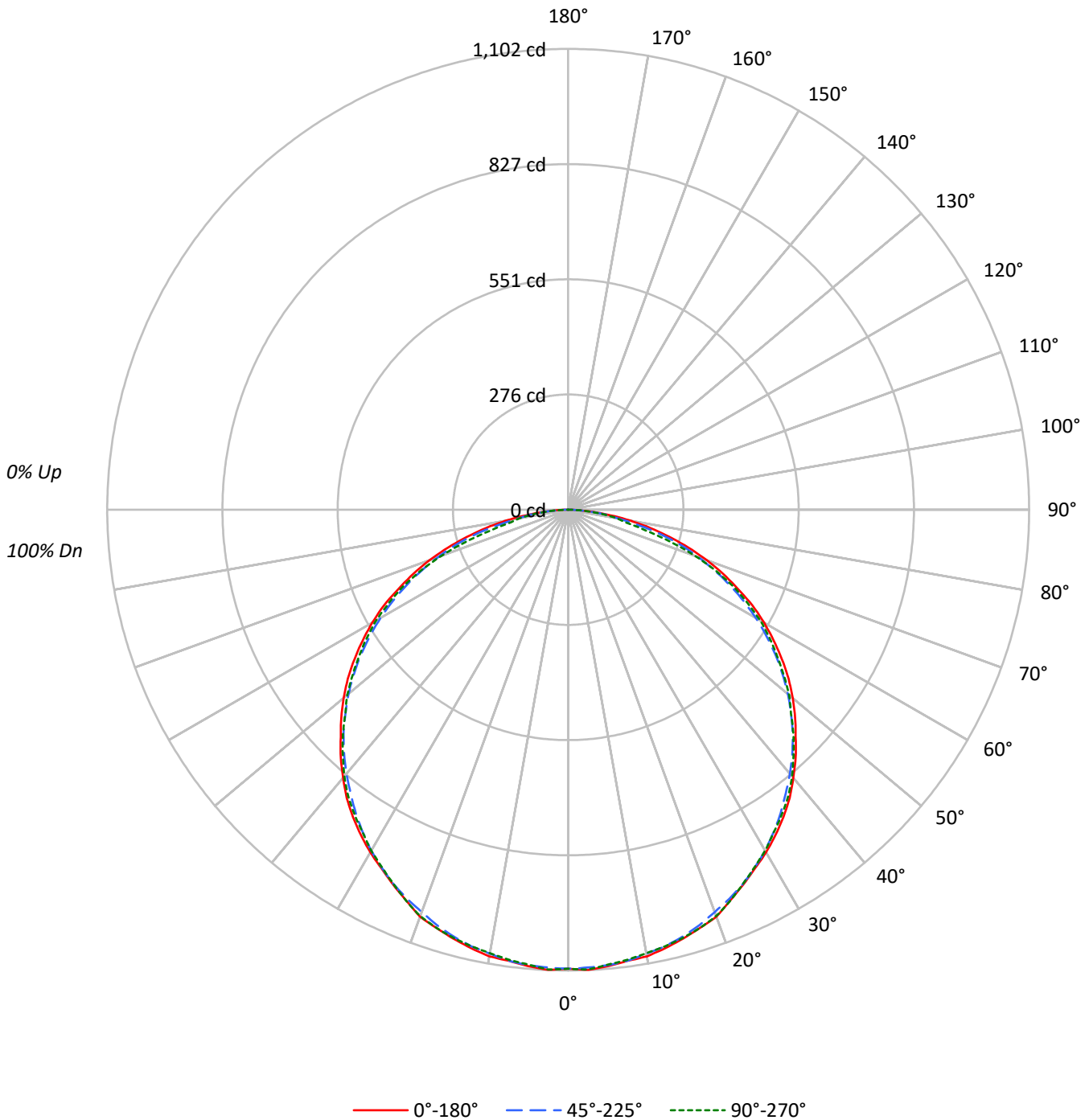
Input Watts (W): 23.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P393444

CATALOG NUMBER: 24EN-LD2-34-UNV-L82765-W2A-1-U (3500K)

Luminous Intensity Polar Plot





TEST NUMBER: P393444

CATALOG NUMBER: 24EN-LD2-34-UNV-L82765-W2A-1-U (3500K)

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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	109	104	99	95	106	101	97	94	97	94	91	93	90	88	90	87	85	83
2	98	90	83	77	96	88	82	76	85	79	74	81	77	73	78	74	71	69
3	90	79	70	64	87	77	69	63	74	68	62	71	66	61	69	64	60	58
4	82	70	61	54	79	68	60	53	66	58	53	63	57	52	61	56	51	49
5	75	62	53	46	73	61	52	46	59	51	45	57	50	45	55	49	44	42
6	69	56	47	40	67	55	46	40	53	45	40	51	44	39	50	44	39	37
7	64	50	42	35	62	50	41	35	48	40	35	47	40	35	45	39	34	32
8	60	46	37	31	58	45	37	31	44	36	31	43	36	31	41	35	31	29
9	56	42	34	28	54	42	34	28	40	33	28	39	33	28	38	32	28	26
10	52	39	31	26	51	38	31	25	37	30	25	36	30	25	35	29	25	23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1477	1477	1477
5°	1480	1476	1475
10°	1482	1473	1471
15°	1479	1472	1476
20°	1484	1466	1481
25°	1469	1466	1466
30°	1470	1463	1463
35°	1473	1455	1462
40°	1470	1449	1462
45°	1463	1445	1449
50°	1467	1435	1443
55°	1464	1420	1431
60°	1455	1394	1427
65°	1423	1357	1390
70°	1386	1300	1271
75°	1300	1201	1000
80°	1167	939	924
85°	922	848	775



TEST NUMBER: P393444

CATALOG NUMBER: 24EN-LD2-34-UNV-L82765-W2A-1-U (3500K)

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	103.9	3.2
10°-20°	298.6	9.1
20°-30°	455.5	13.9
30°-40°	555.8	17.0
40°-50°	588.0	17.9
50°-60°	545.0	16.6
60°-70°	428.0	13.1
70°-80°	238.8	7.3
80°-90°	63.8	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°	858.1	26.2
0°-40°	1413.8	43.1
0°-60°	2546.9	77.7
0°-90°	3277.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3277.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1098	1098	1098	1098	1098	
5°	1096	1095	1093	1092	1092	104
15°	1062	1059	1057	1054	1060	300
25°	990	988	988	986	988	457
35°	897	890	886	884	890	561
45°	769	766	760	760	762	595
55°	624	614	605	604	610	557
65°	447	438	426	429	437	443
75°	250	241	231	202	192	265
85°	60	55	55	51	50	70
90°	0	0	0	0	0	



TEST NUMBER: P393444

CATALOG NUMBER: 24EN-LD2-34-UNV-L82765-W2A-1-U (3500K)

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1097.7	1097.7	1097.7	1097.7	1097.7
2.5°	1101.5	1097.7	1095.8	1097.7	1100.5
5°	1095.8	1094.9	1093.0	1092.0	1092.0
7.5°	1088.2	1090.1	1088.2	1085.4	1085.4
10°	1084.4	1082.6	1077.8	1076.9	1076.9
12.5°	1074.0	1071.2	1069.3	1065.5	1069.3
15°	1061.7	1058.9	1057.0	1054.1	1059.8
17.5°	1048.5	1041.8	1041.8	1041.8	1048.5
20°	1036.1	1026.7	1023.8	1025.7	1034.2
22.5°	1011.5	1007.7	1006.8	1008.7	1012.5
25°	989.7	987.8	987.8	985.9	987.8
27.5°	967.0	967.0	965.1	963.2	964.2
30°	946.2	943.3	941.4	939.5	941.4
32.5°	922.5	917.8	914.0	913.0	914.9
35°	896.9	890.3	885.6	883.7	890.3
37.5°	869.5	860.0	854.3	854.3	863.8
40°	837.2	826.8	824.9	824.0	832.5
42.5°	805.0	797.5	792.7	793.7	797.5
45°	769.1	766.2	759.6	759.6	761.5
47.5°	735.9	732.1	722.6	724.5	722.6
50°	700.9	694.2	685.7	682.9	689.5
52.5°	663.9	656.4	645.9	644.0	649.7
55°	624.1	613.7	605.2	604.3	609.9
57.5°	582.5	572.1	561.6	561.6	571.1
60°	540.8	530.4	518.1	518.1	530.4
62.5°	497.2	485.9	472.6	475.5	483.0
65°	447.0	438.5	426.2	429.0	436.6
67.5°	400.6	391.2	377.9	381.7	381.7
70°	352.3	340.0	330.5	324.9	323.0
72.5°	301.2	290.8	284.1	263.3	257.6
75°	250.0	240.6	231.1	201.7	192.3
77.5°	200.8	194.2	175.2	144.0	140.2
80°	150.6	147.7	121.2	119.3	119.3
82.5°	102.3	100.4	90.9	86.2	85.2
85°	59.7	54.9	54.9	51.1	50.2
87.5°	20.8	21.8	23.7	22.7	21.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)