

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: P393523

Luminaire Tested: **24EN-LD2-45-UNV-L92765-W2A-1-U (3000K)**

Issue Date: 3/28/2020

Test Information

Test Method: LM-79-08
Report Number: P393523
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-563-34)
Test Lab: INNOVATION CENTER
Issue Date: 3/28/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24EN-LD2-45-UNV-L92765-W2A-1-U (3000K)
Description: 2X4 ENCOUNTER, 4500 LUMENS, VIVIDTUNE TUNABLE WHITE
Light Source: 2700K/6500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3546.8 lumens
Efficiency: N/A
Efficacy: 112.2 lumens/watt
Spacing Criteria (0/90/45): 1.28 / 1.28 / 1.4
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

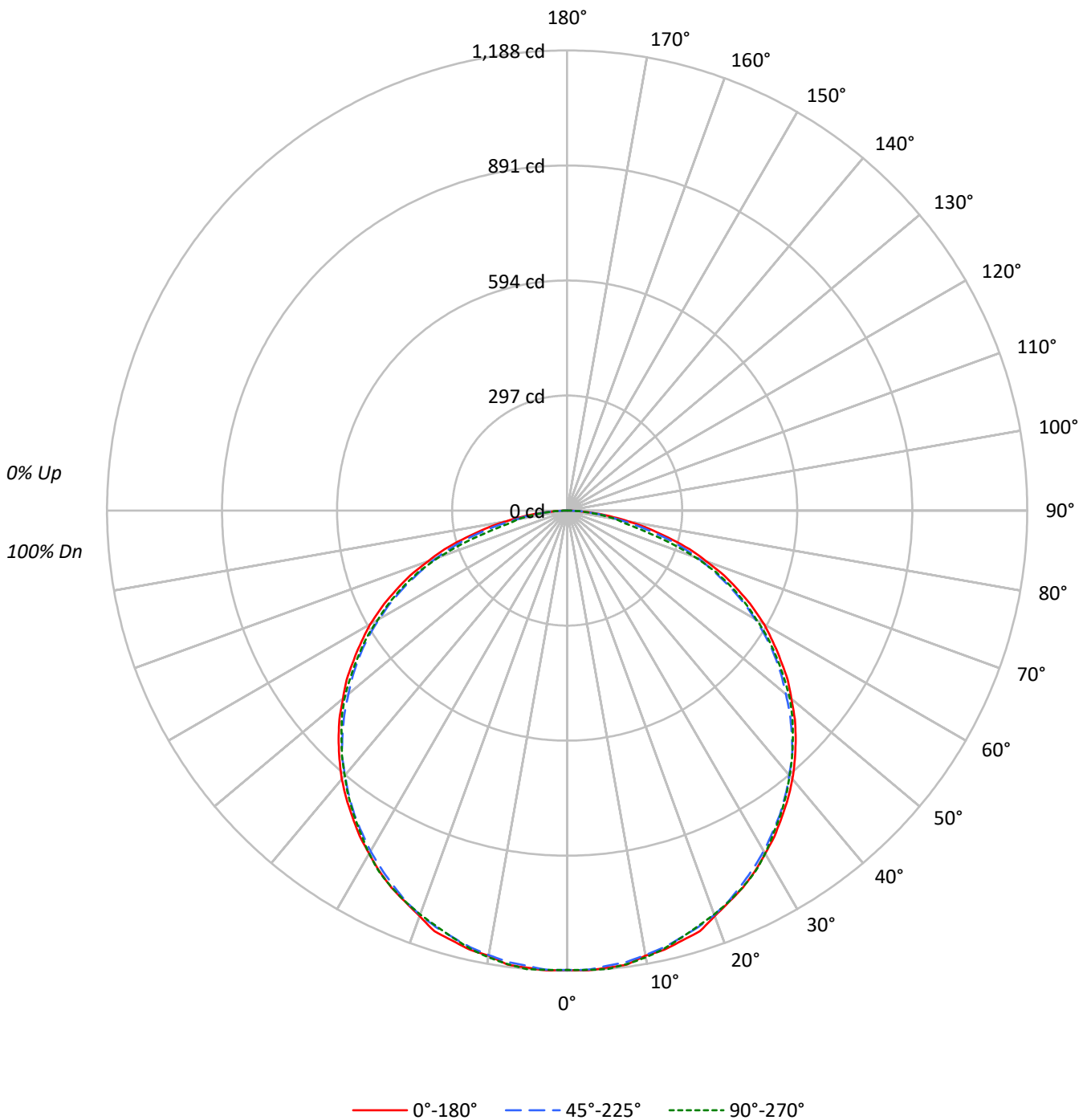
Input Watts (W): 31.6
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P393523

CATALOG NUMBER: 24EN-LD2-45-UNV-L92765-W2A-1-U (3000K)

Luminous Intensity Polar Plot





TEST NUMBER: P393523

CATALOG NUMBER: 24EN-LD2-45-UNV-L92765-W2A-1-U (3000K)

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	108	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	84	79	74	81	77	73	78	74	71	69
3	90	79	70	64	87	77	69	63	74	67	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°	1596	1596	1596
5°	1600	1593	1605
10°	1594	1592	1600
15°	1600	1588	1589
20°	1595	1591	1588
25°	1594	1583	1593
30°	1589	1577	1589
35°	1587	1573	1577
40°	1590	1566	1569
45°	1588	1561	1567
50°	1582	1543	1569
55°	1578	1535	1547
60°	1579	1508	1521
65°	1555	1469	1493
70°	1502	1416	1383
75°	1405	1300	1082
80°	1241	1044	1002
85°	1016	920	837



TEST NUMBER: P393523

CATALOG NUMBER: 24EN-LD2-45-UNV-L92765-W2A-1-U (3000K)

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	112.4	3.2
10°-20°	322.8	9.1
20°-30°	492.5	13.9
30°-40°	600.8	16.9
40°-50°	635.9	17.9
50°-60°	589.8	16.6
60°-70°	463.6	13.1
70°-80°	259.8	7.3
80°-90°	69.4	2.0
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°	927.6	26.2
0°-40°	1528.4	43.1
0°-60°	2754.0	77.6
0°-90°	3546.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3546.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1186	1186	1186	1186	1186	
5°	1184	1182	1180	1179	1188	113
15°	1149	1144	1140	1143	1141	325
25°	1074	1068	1066	1067	1073	495
35°	966	963	958	958	960	605
45°	834	829	821	818	824	644
55°	673	665	654	655	660	602
65°	488	475	461	464	469	483
75°	270	264	250	219	208	287
85°	66	60	60	56	54	76
90°	0	0	0	0	0	



TEST NUMBER: P393523

CATALOG NUMBER: 24EN-LD2-45-UNV-L92765-W2A-1-U (3000K)

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1186.0	1186.0	1186.0	1186.0	1186.0
2.5°	1188.3	1184.5	1186.8	1182.1	1186.8
5°	1184.5	1182.1	1179.8	1179.0	1188.3
7.5°	1182.1	1177.5	1175.2	1172.8	1180.6
10°	1166.6	1168.2	1165.1	1165.9	1171.3
12.5°	1161.2	1156.6	1155.0	1155.0	1158.1
15°	1148.8	1144.2	1140.3	1142.6	1141.1
17.5°	1138.8	1126.4	1127.2	1127.2	1124.8
20°	1114.0	1108.6	1110.9	1107.0	1109.4
22.5°	1093.1	1090.0	1090.8	1086.9	1092.3
25°	1073.7	1068.3	1066.0	1066.8	1073.0
27.5°	1049.8	1044.3	1041.2	1040.5	1051.3
30°	1022.7	1018.8	1014.9	1014.9	1022.7
32.5°	996.3	990.9	986.3	985.5	990.1
35°	966.1	963.0	957.6	957.6	959.9
37.5°	936.7	930.5	925.9	926.7	928.2
40°	905.0	898.8	891.8	891.8	893.4
42.5°	870.1	864.7	860.1	857.0	860.1
45°	834.5	829.1	820.6	818.3	823.7
47.5°	797.4	790.4	780.3	781.9	788.9
50°	755.6	748.6	737.0	740.9	749.4
52.5°	717.6	709.1	696.7	700.6	704.5
55°	672.7	665.0	654.2	654.9	659.6
57.5°	629.4	620.9	609.3	608.5	615.5
60°	586.8	575.2	560.5	561.3	565.1
62.5°	539.6	527.2	512.5	512.5	519.5
65°	488.5	475.3	461.4	464.5	469.1
67.5°	438.9	421.9	409.5	411.1	416.5
70°	381.7	370.0	360.0	354.6	351.5
72.5°	331.3	315.1	307.3	288.0	281.8
75°	270.2	264.0	250.1	219.1	208.2
77.5°	216.0	209.8	191.2	157.9	151.7
80°	160.2	161.8	134.7	129.3	129.3
82.5°	112.3	107.6	98.3	93.7	91.4
85°	65.8	60.4	59.6	56.5	54.2
87.5°	21.7	24.8	24.0	24.8	24.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)