

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: P393501

Luminaire Tested: **24EN-LD2-40-UNV-L93050-W2A-1-U (4000K)**

Issue Date: 3/28/2020

Test Information

Test Method: LM-79-08
Report Number: P393501
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-L93050-W2A-1-U (4000K)
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: 3538.3 lumens
Efficiency: N/A
Efficacy: 127.3 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

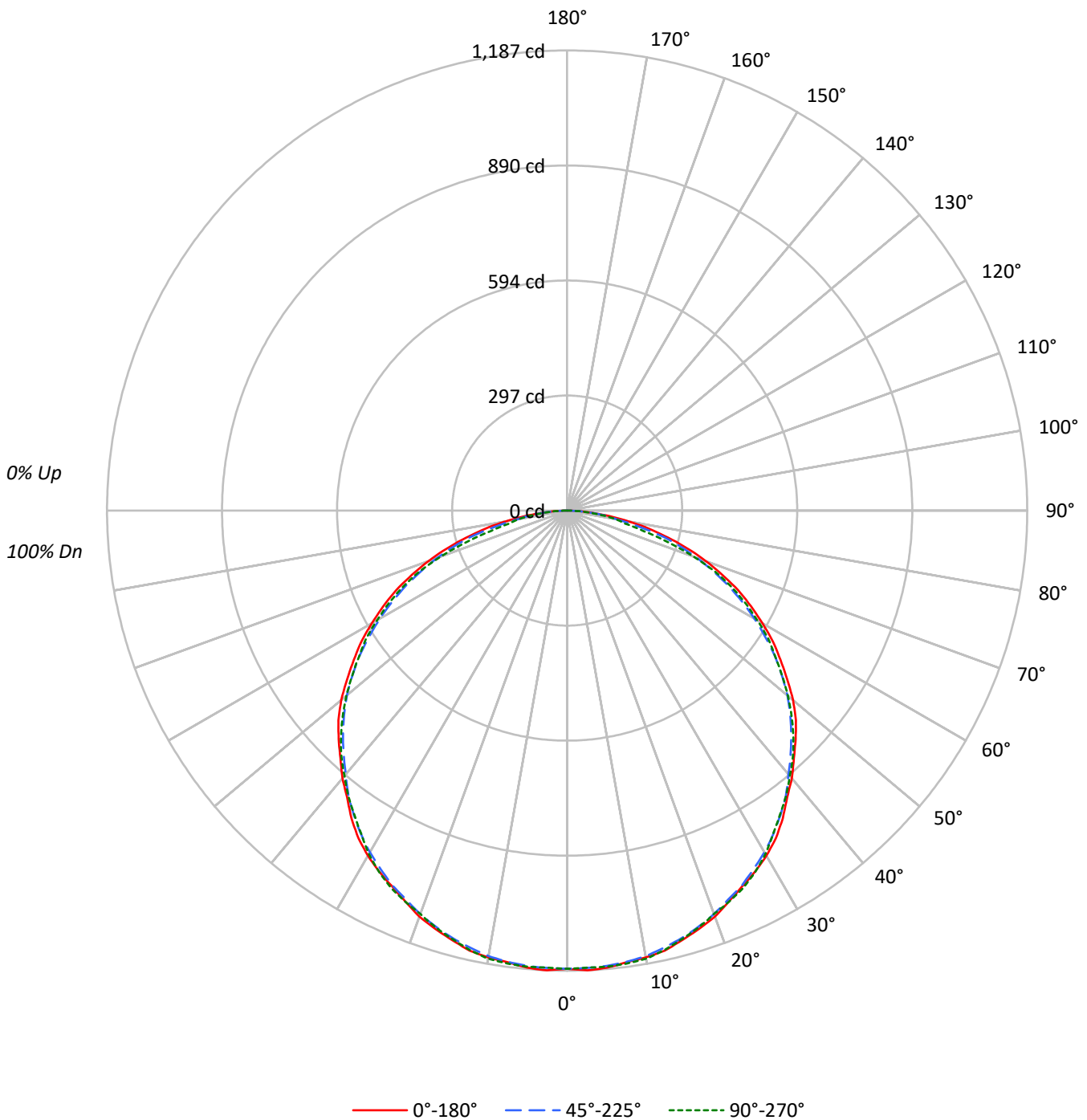
Input Watts (W): 27.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P393501

CATALOG NUMBER: 24EN-LD2-40-UNV-L93050-W2A-1-U (4000K)

Luminous Intensity Polar Plot





TEST NUMBER: P393501

CATALOG NUMBER: 24EN-LD2-40-UNV-L93050-W2A-1-U (4000K)

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	80	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	42	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	36	29	25	23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1590	1590	1590
5°	1599	1593	1595
10°	1599	1594	1604
15°	1598	1590	1594
20°	1596	1586	1586
25°	1587	1583	1595
30°	1597	1581	1589
35°	1593	1575	1573
40°	1583	1560	1570
45°	1586	1556	1571
50°	1593	1552	1556
55°	1576	1535	1537
60°	1566	1502	1526
65°	1552	1460	1493
70°	1495	1399	1361
75°	1398	1303	1063
80°	1245	1009	995
85°	985	931	837



TEST NUMBER: P393501

CATALOG NUMBER: 24EN-LD2-40-UNV-L93050-W2A-1-U (4000K)

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	112.2	3.2
10°-20°	322.5	9.1
20°-30°	492.5	13.9
30°-40°	600.9	17.0
40°-50°	634.4	17.9
50°-60°	588.3	16.6
60°-70°	460.8	13.0
70°-80°	257.9	7.3
80°-90°	68.8	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°	927.3	26.2
0°-40°	1528.1	43.2
0°-60°	2750.8	77.7
0°-90°	3538.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3538.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1182	1182	1182	1182	1182	
5°	1184	1184	1179	1180	1181	112
15°	1147	1142	1142	1139	1144	324
25°	1069	1069	1067	1065	1074	494
35°	970	961	959	958	957	606
45°	833	826	818	816	826	643
55°	672	663	654	654	655	601
65°	487	473	459	461	469	479
75°	269	261	251	218	204	285
85°	64	61	60	57	54	75
90°	0	0	0	0	0	



TEST NUMBER: P393501

CATALOG NUMBER: 24EN-LD2-40-UNV-L93050-W2A-1-U (4000K)

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1181.9	1181.9	1181.9	1181.9	1181.9
2.5°	1187.1	1184.5	1181.0	1181.9	1180.1
5°	1183.6	1183.6	1179.2	1180.1	1181.0
7.5°	1174.9	1175.7	1174.0	1170.5	1178.4
10°	1170.5	1164.4	1167.0	1160.0	1174.0
12.5°	1162.6	1153.0	1154.8	1149.5	1160.9
15°	1146.9	1141.7	1141.7	1139.1	1144.3
17.5°	1131.2	1127.7	1125.9	1127.7	1127.7
20°	1114.6	1112.0	1107.6	1111.1	1107.6
22.5°	1091.0	1092.8	1085.8	1093.6	1091.9
25°	1069.2	1069.2	1066.6	1064.8	1074.4
27.5°	1050.0	1043.8	1042.1	1038.6	1050.8
30°	1028.1	1016.8	1017.6	1012.4	1022.9
32.5°	1001.9	988.8	989.7	984.4	988.8
35°	969.6	960.9	959.1	958.2	957.4
37.5°	932.0	931.2	926.8	929.4	927.7
40°	901.5	899.7	888.4	891.0	893.6
42.5°	865.6	863.0	853.4	855.2	862.2
45°	833.3	825.5	817.6	815.9	825.5
47.5°	800.1	787.9	780.9	775.7	785.3
50°	760.8	750.3	741.6	736.4	743.4
52.5°	715.4	706.7	697.9	696.2	698.8
55°	671.7	663.0	654.3	654.3	655.1
57.5°	629.8	618.4	605.3	608.0	614.9
60°	581.8	571.3	558.2	558.2	566.9
62.5°	534.6	521.5	508.4	510.1	518.9
65°	487.4	472.6	458.6	461.2	469.1
67.5°	433.3	420.2	407.1	410.5	414.9
70°	380.0	366.9	355.5	352.0	345.9
72.5°	325.8	315.3	305.7	286.5	276.9
75°	269.0	261.2	250.7	217.5	204.4
77.5°	216.6	210.5	186.9	156.4	152.0
80°	160.7	160.7	130.2	127.5	128.4
82.5°	109.2	107.4	98.7	92.6	90.0
85°	63.8	61.1	60.3	56.8	54.2
87.5°	21.0	24.5	24.5	23.6	24.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)