

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: P393452

Luminaire Tested: **24EN-LD2-34-UNV-L83050-W2A-1-U (3500K)**

Issue Date: 3/28/2020

Test Information

Test Method: LM-79-08
Report Number: P393452
Test Lab: INNOVATION CENTER (G3)
Issue Date: 3/28/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24EN-LD2-34-UNV-L83050-W2A-1-U (3500K)
Description: 2X4 ENCOUNTER, 3400 LUMENS, VIVIDTUNE TUNABLE WHITE
Light Source: 2700K/6500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3460.6 lumens
Efficiency: N/A
Efficacy: 144.2 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

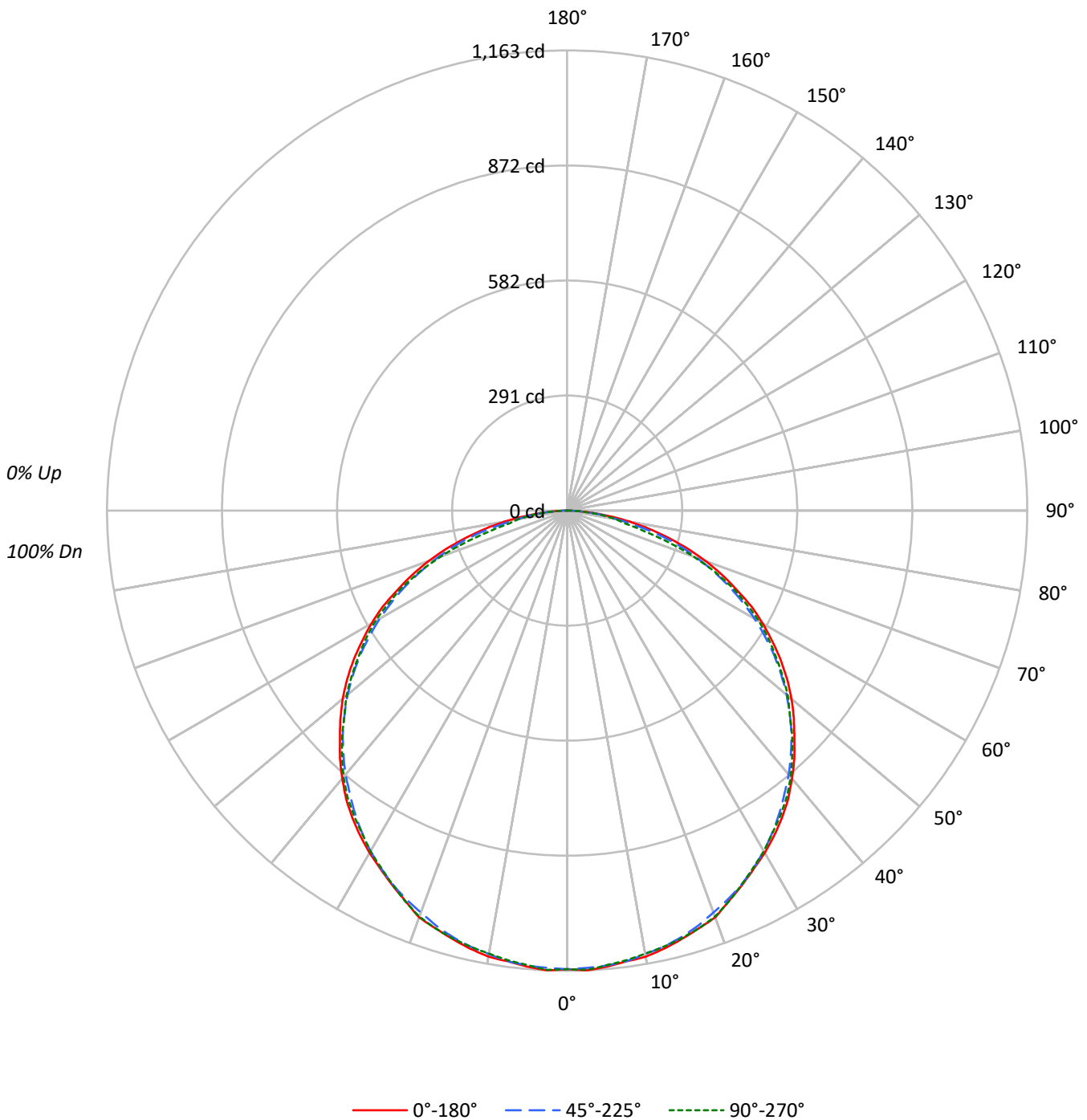
Input Watts (W): 24
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	1559	1559	1559
5°	1563	1559	1557
10°	1564	1555	1553
15°	1562	1555	1559
20°	1566	1548	1564
25°	1551	1548	1548
30°	1552	1544	1544
35°	1555	1536	1544
40°	1553	1530	1544
45°	1545	1526	1530
50°	1549	1515	1524
55°	1546	1499	1511
60°	1537	1472	1507
65°	1503	1433	1468
70°	1463	1373	1341
75°	1372	1268	1055
80°	1232	992	976
85°	973	895	818



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	109.7	3.2
10°-20°	315.3	9.1
20°-30°	480.9	13.9
30°-40°	586.8	17.0
40°-50°	620.9	17.9
50°-60°	575.5	16.6
60°-70°	451.9	13.1
70°-80°	252.2	7.3
80°-90°	67.4	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°	906.0	26.2
0°-40°	1492.8	43.1
0°-60°	2689.1	77.7
0°-90°	3460.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3460.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1159	1159	1159	1159	1159	
5°	1157	1156	1154	1153	1153	110
15°	1121	1118	1116	1113	1119	317
25°	1045	1043	1043	1041	1043	482
35°	947	940	935	933	940	592
45°	812	809	802	802	804	628
55°	659	648	639	638	644	589
65°	472	463	450	453	461	468
75°	264	254	244	213	203	279
85°	63	58	58	54	53	74
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1159	1159	1159	1159	1159
2.5°	1163	1159	1157	1159	1162
5°	1157	1156	1154	1153	1153
7.5°	1149	1151	1149	1146	1146
10°	1145	1143	1138	1137	1137
12.5°	1134	1131	1129	1125	1129
15°	1121	1118	1116	1113	1119
17.5°	1107	1100	1100	1100	1107
20°	1094	1084	1081	1083	1092
22.5°	1068	1064	1063	1065	1069
25°	1045	1043	1043	1041	1043
27.5°	1021	1021	1019	1017	1018
30°	999	996	994	992	994
32.5°	974	969	965	964	966
35°	947	940	935	933	940
37.5°	918	908	902	902	912
40°	884	873	871	870	879
42.5°	850	842	837	838	842
45°	812	809	802	802	804
47.5°	777	773	763	765	763
50°	740	733	724	721	728
52.5°	701	693	682	680	686
55°	659	648	639	638	644
57.5°	615	604	593	593	603
60°	571	560	547	547	560
62.5°	525	513	499	502	510
65°	472	463	450	453	461
67.5°	423	413	399	403	403
70°	372	359	349	343	341
72.5°	318	307	300	278	272
75°	264	254	244	213	203
77.5°	212	205	185	152	148
80°	159	156	128	126	126
82.5°	108	106	96	91	90
85°	63	58	58	54	53
87.5°	22	23	25	24	23
90°	0	0	0	0	0

(END OF REPORT)