

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: P393196

Luminaire Tested: **14EN-LD2-51-UNV-L83050-W2A-1-U (3500K)**

Issue Date: 3/28/2020

Test Information

Test Method: LM-79-08
Report Number: P393196
Test Lab: INNOVATION CENTER (G3)
Issue Date: 3/28/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 14EN-LD2-51-UNV-L83050-W2A-1-U (3500K)
Description: 1X4 ENCOUNTER, 5100 LUMENS, VIVIDTUNE TUNABLE WHITE
Light Source: 2700K/6500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5081.8 lumens
Efficiency: N/A
Efficacy: 98.5 lumens/watt
Spacing Criteria (0/90/45): 1.29 / 1.27 / 1.4
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

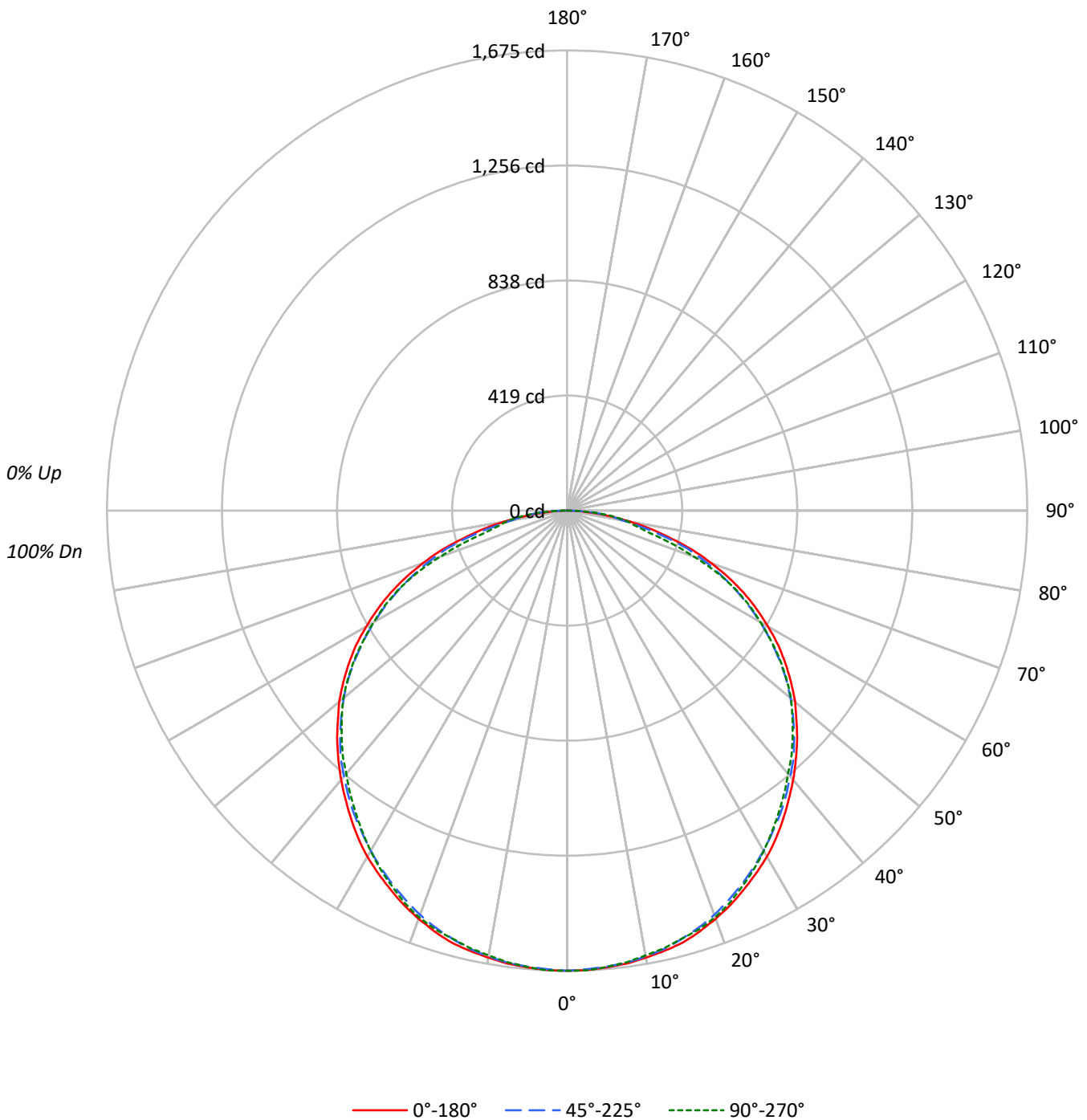
Input Watts (W): 51.6
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	108	103	99	95	106	101	97	93	97	93	90	93	90	88	89	87	85	83
2	98	90	83	77	96	88	81	76	84	79	74	81	76	72	78	74	71	68
3	89	78	70	63	87	77	69	63	74	67	62	71	65	60	68	64	59	57
4	82	69	60	53	79	68	59	53	65	58	52	63	57	51	61	55	51	48
5	75	62	52	46	73	61	52	45	58	51	45	56	50	44	54	49	44	42
6	69	55	46	40	67	54	46	39	53	45	39	51	44	39	49	43	38	36
7	64	50	41	35	62	49	41	35	48	40	35	46	39	34	45	39	34	32
8	59	46	37	31	58	45	37	31	44	36	31	42	36	31	41	35	30	28
9	56	42	34	28	54	41	33	28	40	33	28	39	32	27	38	32	27	25
10	52	39	31	25	51	38	30	25	37	30	25	36	30	25	35	29	25	23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4507	4507	4507
5°	4508	4500	4503
10°	4514	4503	4492
15°	4535	4496	4494
20°	4527	4485	4510
25°	4519	4460	4480
30°	4521	4443	4447
35°	4504	4438	4409
40°	4496	4437	4395
45°	4506	4445	4418
50°	4534	4442	4454
55°	4551	4415	4434
60°	4542	4365	4376
65°	4514	4273	4298
70°	4390	4154	3887
75°	4086	3826	3182
80°	3611	3161	3456
85°	2594	3396	3458



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	158.9	3.1
10°-20°	456.6	9.0
20°-30°	694.7	13.7
30°-40°	848.7	16.7
40°-50°	904.0	17.8
50°-60°	847.7	16.7
60°-70°	672.8	13.2
70°-80°	383.0	7.5
80°-90°	115.4	2.3
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°	1310.3	25.8
0°-40°	2158.9	42.5
0°-60°	3910.6	77.0
0°-90°	5081.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5081.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1675	1675	1675	1675	1675	
5°	1669	1674	1666	1677	1667	159
15°	1628	1621	1614	1616	1613	459
25°	1522	1508	1502	1499	1509	702
35°	1371	1364	1351	1349	1342	858
45°	1184	1182	1168	1160	1161	914
55°	970	961	941	937	945	866
65°	709	695	671	676	675	699
75°	393	383	368	326	306	418
85°	84	94	110	109	112	105
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1675	1675	1675	1675	1675
2.5°	1674	1681	1671	1679	1675
5°	1669	1674	1666	1677	1667
7.5°	1663	1666	1660	1670	1658
10°	1652	1654	1648	1656	1644
12.5°	1641	1638	1634	1637	1631
15°	1628	1621	1614	1616	1613
17.5°	1606	1597	1592	1590	1598
20°	1581	1570	1566	1564	1575
22.5°	1554	1540	1535	1533	1546
25°	1522	1508	1502	1499	1509
27.5°	1489	1474	1467	1465	1472
30°	1455	1438	1430	1429	1431
32.5°	1415	1402	1390	1391	1387
35°	1371	1364	1351	1349	1342
37.5°	1325	1325	1308	1311	1298
40°	1280	1281	1263	1264	1251
42.5°	1232	1235	1220	1212	1209
45°	1184	1182	1168	1160	1161
47.5°	1132	1132	1116	1109	1112
50°	1083	1079	1061	1055	1064
52.5°	1027	1022	1004	997	1006
55°	970	961	941	937	945
57.5°	911	899	877	875	879
60°	844	834	811	807	813
62.5°	779	765	742	742	748
65°	709	695	671	676	675
67.5°	635	621	600	602	591
70°	558	542	528	509	494
72.5°	480	463	458	414	399
75°	393	383	368	326	306
77.5°	316	306	279	247	252
80°	233	235	204	216	223
82.5°	153	158	165	174	176
85°	84	94	110	109	112
87.5°	33	44	48	50	47
90°	0	0	0	0	0

(END OF REPORT)