

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: P393198

Luminaire Tested: **14EN-LD2-51-UNV-L83050-W2A-1-U (4500K)**

Issue Date: 3/28/2020

Test Information

Test Method: LM-79-08
Report Number: P393198
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-563-56)
Test Lab: INNOVATION CENTER
Issue Date: 3/28/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 14EN-LD2-51-UNV-L83050-W2A-1-U (4500K)
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: 5172.4 lumens
Efficiency: N/A
Efficacy: 101.8 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

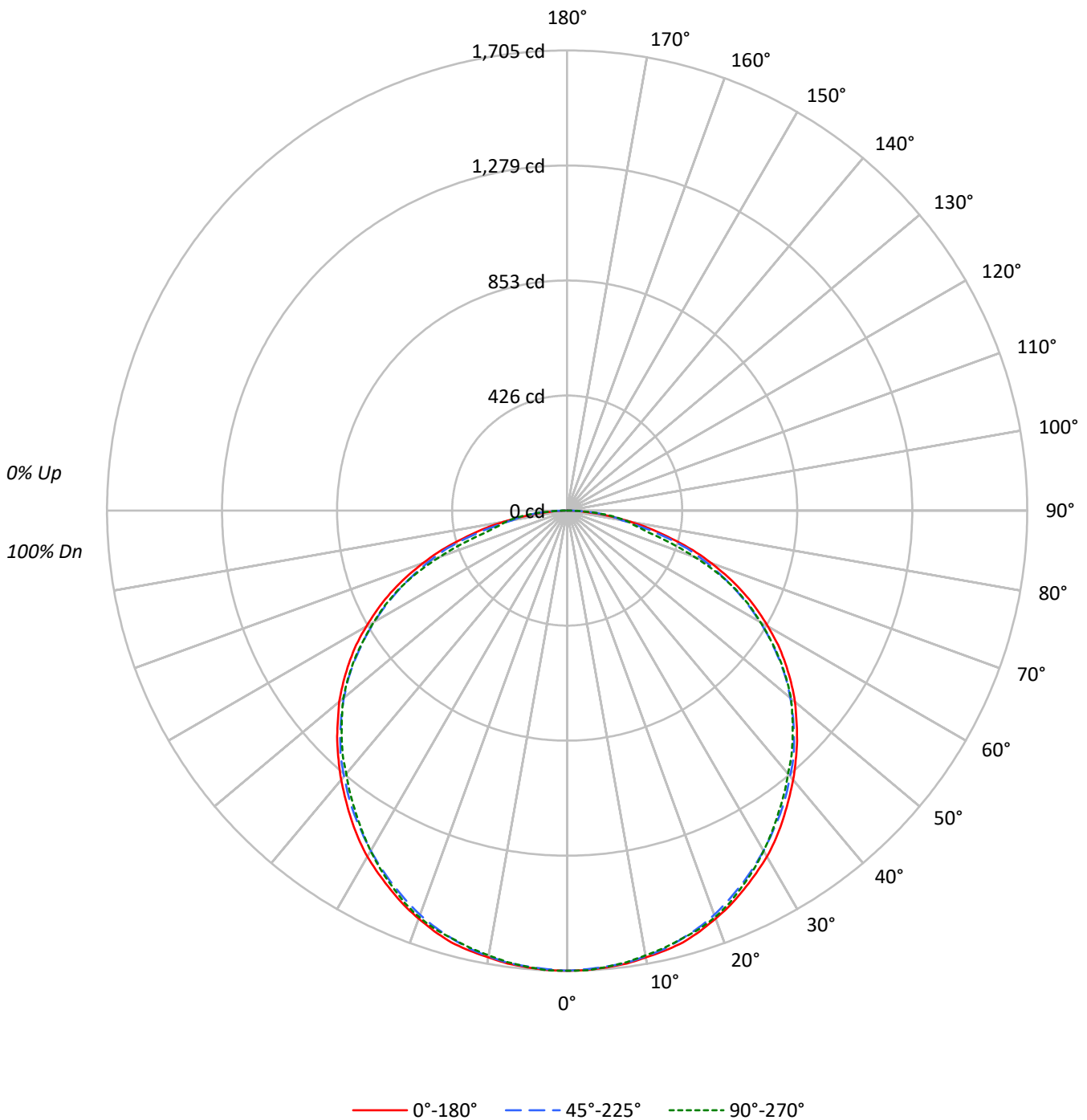
Input Watts (W): 50.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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					100			
1	108	103	99	95	106	101	97	93	97	93	90	93	90	88	89	87	85	83					83			
2	98	90	83	77	96	88	81	76	84	79	74	81	76	72	78	74	71	68					68			
3	89	78	70	63	87	77	69	63	74	67	62	71	65	60	68	64	59	57					57			
4	82	69	60	53	79	68	59	53	65	58	52	63	57	51	61	55	51	48					48			
5	75	62	52	46	73	61	52	45	58	51	45	56	50	44	54	49	44	42					42			
6	69	55	46	40	67	54	46	39	53	45	39	51	44	39	49	43	38	36					36			
7	64	50	41	35	62	49	41	35	48	40	35	46	39	34	45	39	34	32					32			
8	59	46	37	31	58	45	37	31	44	36	31	42	36	31	41	35	30	28					28			
9	56	42	34	28	54	41	33	28	40	33	28	39	32	27	38	32	27	25					25			
10	52	39	31	25	51	38	30	25	37	30	25	36	30	25	35	29	25	23					23			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4588	4588	4588
5°	4589	4581	4583
10°	4594	4583	4572
15°	4616	4577	4574
20°	4608	4564	4591
25°	4600	4539	4560
30°	4602	4523	4526
35°	4584	4517	4487
40°	4577	4516	4473
45°	4586	4524	4497
50°	4615	4521	4534
55°	4632	4494	4512
60°	4623	4443	4454
65°	4595	4349	4374
70°	4468	4228	3956
75°	4159	3895	3239
80°	3676	3217	3518
85°	2640	3458	3520



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	161.8	3.1
10°-20°	464.7	9.0
20°-30°	707.1	13.7
30°-40°	863.8	16.7
40°-50°	920.1	17.8
50°-60°	862.9	16.7
60°-70°	684.8	13.2
70°-80°	389.8	7.5
80°-90°	117.4	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°	1333.6	25.8
0°-40°	2197.4	42.5
0°-60°	3980.3	77.0
0°-90°	5172.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5172.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1705	1705	1705	1705	1705	
5°	1699	1704	1696	1707	1697	162
15°	1657	1650	1643	1645	1642	467
25°	1549	1535	1529	1526	1536	715
35°	1395	1388	1375	1373	1366	874
45°	1205	1203	1189	1181	1182	930
55°	987	978	958	954	962	882
65°	722	707	683	688	687	711
75°	400	390	375	332	312	425
85°	86	96	112	111	114	107
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1704.9	1704.9	1704.9	1704.9	1704.9
2.5°	1703.8	1711.0	1700.8	1708.9	1704.9
5°	1698.8	1703.8	1695.7	1706.9	1696.7
7.5°	1692.6	1695.7	1689.6	1699.8	1687.6
10°	1681.4	1683.5	1677.4	1685.5	1673.3
12.5°	1670.3	1667.2	1663.1	1666.2	1660.1
15°	1657.0	1649.9	1642.8	1644.8	1641.8
17.5°	1634.6	1625.5	1620.4	1618.3	1626.5
20°	1609.2	1598.0	1593.9	1591.9	1603.1
22.5°	1581.7	1567.5	1562.4	1560.3	1573.6
25°	1549.1	1534.9	1528.8	1525.7	1535.9
27.5°	1515.5	1500.3	1493.2	1491.1	1498.2
30°	1480.9	1463.6	1455.5	1454.5	1456.5
32.5°	1440.2	1427.0	1414.8	1415.8	1411.7
35°	1395.4	1388.3	1375.1	1373.0	1365.9
37.5°	1348.6	1348.6	1331.3	1334.4	1321.1
40°	1302.8	1303.8	1285.5	1286.5	1273.3
42.5°	1254.0	1257.0	1241.7	1233.6	1230.6
45°	1205.1	1203.1	1188.8	1180.7	1181.7
47.5°	1152.2	1152.2	1135.9	1128.8	1131.8
50°	1102.3	1098.2	1079.9	1073.8	1083.0
52.5°	1045.3	1040.2	1021.9	1014.8	1023.9
55°	987.3	978.1	957.8	953.7	961.8
57.5°	927.2	915.0	892.6	890.6	894.7
60°	859.0	848.9	825.5	821.4	827.5
62.5°	792.9	778.6	755.2	755.2	761.3
65°	721.6	707.4	683.0	688.1	687.0
67.5°	646.3	632.1	610.7	612.7	601.5
70°	567.9	551.7	537.4	518.1	502.8
72.5°	488.6	471.3	466.2	421.4	406.1
75°	400.0	389.8	374.6	331.8	311.5
77.5°	321.6	311.5	284.0	251.4	256.5
80°	237.2	239.2	207.6	219.9	227.0
82.5°	155.7	160.8	167.9	177.1	179.1
85°	85.5	95.7	112.0	110.9	114.0
87.5°	33.6	44.8	48.9	50.9	47.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)