

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: P393212

Luminaire Tested: **14EN-LD2-51-UNV-L93050-W2A-1-U (3500K)**

Issue Date: 3/28/2020

Test Information

Test Method: LM-79-08
Report Number: P393212
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-L93050-W2A-1-U (3500K)
Description: 1X4 ENCOUNTER, 5100 LUMENS, VIVIDTUNE TUNABLE WHITE
Light Source: 2700K/6500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4273.4 lumens
Efficiency: N/A
Efficacy: 84.1 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

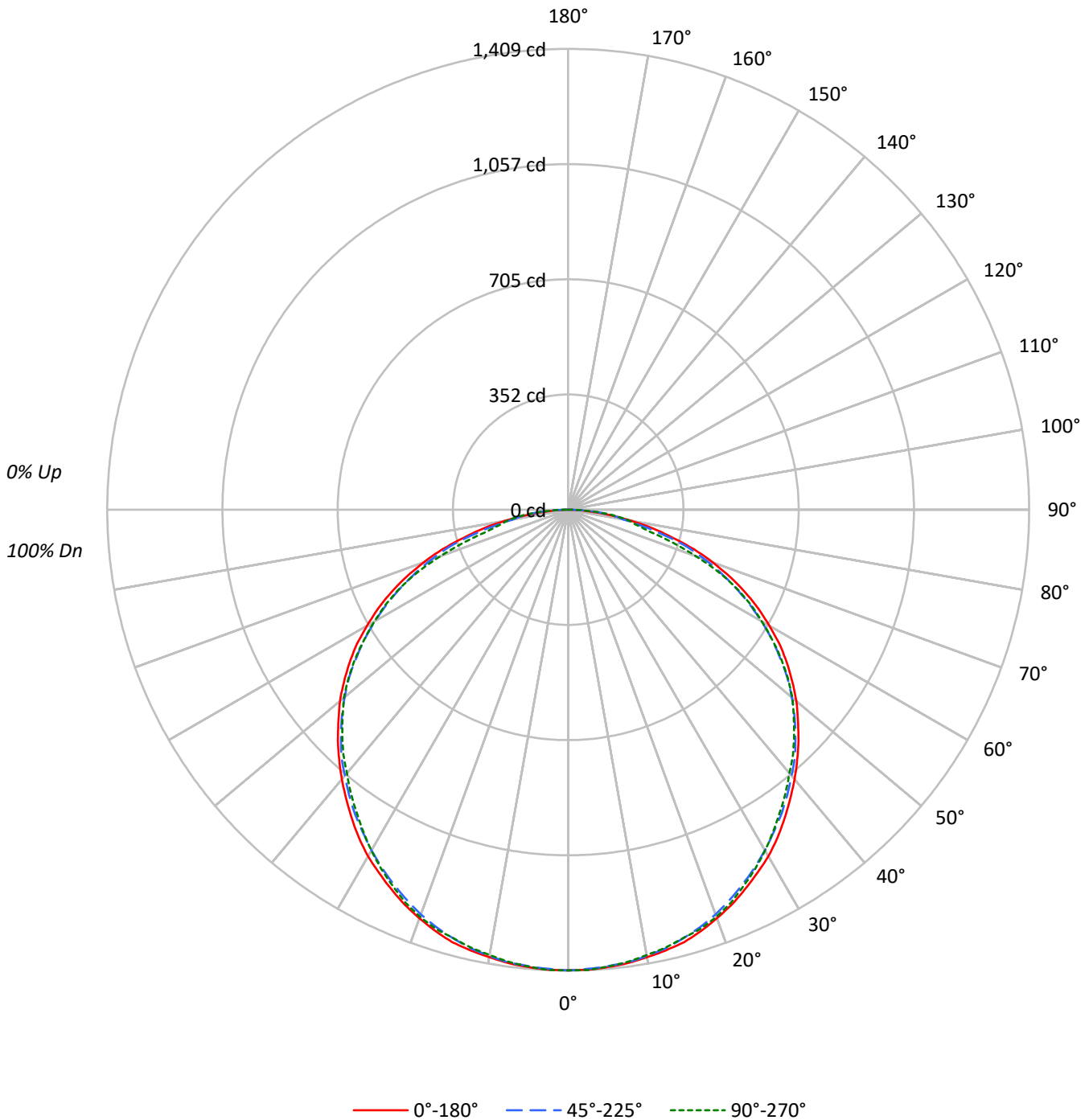
Input Watts (W): 50.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	3791	3791	3791
5°	3791	3784	3787
10°	3796	3787	3778
15°	3814	3781	3779
20°	3807	3771	3793
25°	3800	3750	3768
30°	3802	3736	3739
35°	3787	3732	3707
40°	3781	3731	3695
45°	3789	3738	3715
50°	3813	3735	3746
55°	3827	3712	3728
60°	3820	3670	3680
65°	3796	3593	3614
70°	3692	3493	3268
75°	3436	3218	2675
80°	3036	2658	2906
85°	2180	2856	2908



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	133.7	3.1
10°-20°	384.0	9.0
20°-30°	584.2	13.7
30°-40°	713.7	16.7
40°-50°	760.2	17.8
50°-60°	712.9	16.7
60°-70°	565.8	13.2
70°-80°	322.1	7.5
80°-90°	97.0	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°	1101.8	25.8
0°-40°	1815.5	42.5
0°-60°	3288.6	77.0
0°-90°	4273.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4273.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1409	1409	1409	1409	1409	
5°	1404	1408	1401	1410	1402	134
15°	1369	1363	1357	1359	1356	386
25°	1280	1268	1263	1261	1269	590
35°	1153	1147	1136	1134	1128	722
45°	996	994	982	976	976	768
55°	816	808	791	788	795	728
65°	596	584	564	568	568	588
75°	330	322	310	274	257	351
85°	71	79	92	92	94	88
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1408.6	1408.6	1408.6	1408.6	1408.6
2.5°	1407.7	1413.6	1405.2	1411.9	1408.6
5°	1403.5	1407.7	1401.0	1410.2	1401.8
7.5°	1398.5	1401.0	1395.9	1404.3	1394.3
10°	1389.2	1390.9	1385.8	1392.6	1382.5
12.5°	1380.0	1377.4	1374.1	1376.6	1371.6
15°	1369.0	1363.1	1357.3	1358.9	1356.4
17.5°	1350.5	1343.0	1338.8	1337.1	1343.8
20°	1329.5	1320.3	1316.9	1315.2	1324.5
22.5°	1306.8	1295.0	1290.8	1289.1	1300.1
25°	1279.9	1268.1	1263.1	1260.6	1269.0
27.5°	1252.1	1239.5	1233.6	1232.0	1237.8
30°	1223.6	1209.3	1202.5	1201.7	1203.4
32.5°	1189.9	1179.0	1168.9	1169.7	1166.4
35°	1152.9	1147.0	1136.1	1134.4	1128.5
37.5°	1114.2	1114.2	1099.9	1102.5	1091.5
40°	1076.4	1077.2	1062.1	1062.9	1052.0
42.5°	1036.0	1038.5	1025.9	1019.2	1016.7
45°	995.7	994.0	982.2	975.5	976.3
47.5°	951.9	951.9	938.5	932.6	935.1
50°	910.7	907.4	892.2	887.2	894.7
52.5°	863.6	859.4	844.3	838.4	846.0
55°	815.7	808.1	791.3	787.9	794.7
57.5°	766.1	756.0	737.5	735.8	739.2
60°	709.7	701.3	682.0	678.6	683.7
62.5°	655.1	643.3	624.0	624.0	629.0
65°	596.2	584.4	564.3	568.5	567.6
67.5°	534.0	522.2	504.6	506.2	497.0
70°	469.2	455.8	444.0	428.0	415.4
72.5°	403.6	389.3	385.1	348.1	335.5
75°	330.5	322.1	309.5	274.1	257.3
77.5°	265.7	257.3	234.6	207.7	211.9
80°	195.9	197.6	171.5	181.6	187.5
82.5°	128.7	132.9	138.8	146.3	148.0
85°	70.6	79.0	92.5	91.7	94.2
87.5°	27.8	37.0	40.4	42.0	39.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)