

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: P393086

Luminaire Tested: **14EN-LD2-33-UNV-L93050-W2A-1-U (4500K)**

Issue Date: 3/28/2020

Test Information

Test Method: LM-79-08
Report Number: P393086
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-563-52)
Test Lab: INNOVATION CENTER
Issue Date: 3/28/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 14EN-LD2-33-UNV-L93050-W2A-1-U (4500K)
Description: 1X4 ENCOUNTER, 3300 LUMENS, VIVIDTUNE TUNABLE WHITE
Light Source: 2700K/6500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2902.0 lumens
Efficiency: N/A
Efficacy: 94.8 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

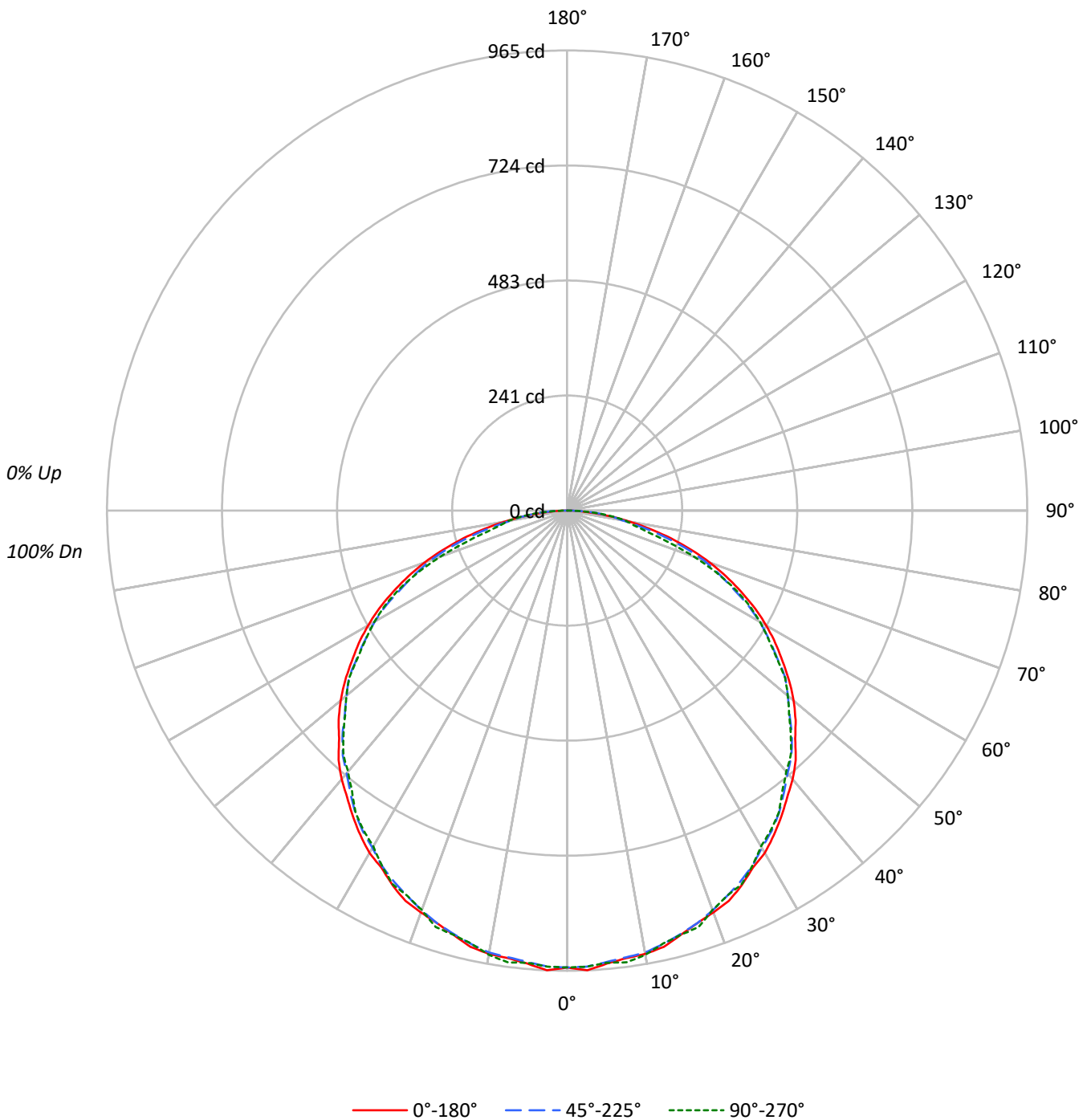
Input Watts (W): 30.6
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	95	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	34	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°	2578	2578	2578
5°	2576	2566	2571
10°	2579	2572	2584
15°	2566	2561	2566
20°	2567	2555	2552
25°	2573	2550	2568
30°	2576	2537	2527
35°	2573	2544	2541
40°	2585	2526	2511
45°	2573	2536	2523
50°	2595	2529	2529
55°	2587	2521	2509
60°	2595	2510	2514
65°	2561	2427	2465
70°	2501	2397	2238
75°	2347	2182	1826
80°	2055	1824	1946
85°	1519	1951	1951



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	90.7	3.1
10°-20°	260.3	9.0
20°-30°	396.9	13.7
30°-40°	484.7	16.7
40°-50°	515.7	17.8
50°-60°	484.2	16.7
60°-70°	384.7	13.3
70°-80°	218.7	7.5
80°-90°	65.9	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°	747.9	25.8
0°-40°	1232.6	42.5
0°-60°	2232.6	76.9
0°-90°	2902.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2902.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	958	958	958	958	958	
5°	954	954	950	955	952	91
15°	921	925	919	923	921	260
25°	867	865	859	860	865	399
35°	783	779	774	771	774	490
45°	676	675	666	665	663	524
55°	551	548	537	536	535	494
65°	402	396	381	387	387	398
75°	226	220	210	184	176	237
85°	49	54	63	62	63	61
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	958.0	958.0	958.0	958.0	958.0
2.5°	965.0	958.0	957.1	958.0	957.1
5°	953.6	953.6	950.1	955.4	951.8
7.5°	946.6	950.1	944.8	950.1	955.4
10°	943.9	943.1	941.3	940.4	945.7
12.5°	936.9	932.5	930.8	933.4	929.9
15°	921.1	924.6	919.4	922.9	921.1
17.5°	907.1	911.5	907.1	908.8	915.8
20°	896.5	897.4	892.1	893.0	891.3
22.5°	886.0	879.0	875.4	876.3	874.6
25°	866.7	864.9	858.8	859.6	864.9
27.5°	843.8	845.6	840.3	839.4	840.3
30°	828.9	824.5	816.6	817.5	813.1
32.5°	807.0	801.7	797.3	792.9	794.7
35°	783.3	778.9	774.5	771.0	773.6
37.5°	757.8	755.2	746.4	745.5	741.1
40°	735.8	727.9	719.2	716.5	714.8
42.5°	709.5	705.1	696.3	691.9	694.6
45°	676.1	675.2	666.5	664.7	663.0
47.5°	649.8	643.6	632.2	633.1	631.3
50°	619.9	614.7	604.1	600.6	604.1
52.5°	587.4	584.8	576.9	573.4	576.0
55°	551.4	547.9	537.4	536.5	534.8
57.5°	518.1	512.8	501.4	497.9	499.6
60°	482.1	476.8	466.3	461.0	467.1
62.5°	444.3	437.3	425.9	426.7	430.3
65°	402.2	396.0	381.1	387.2	387.2
67.5°	360.9	354.7	342.5	342.5	337.2
70°	317.9	310.0	304.7	292.4	284.5
72.5°	272.2	264.3	258.2	237.1	225.7
75°	225.7	219.5	209.9	184.4	175.6
77.5°	177.4	175.6	160.7	141.4	144.0
80°	132.6	135.2	117.7	124.7	125.6
82.5°	90.4	90.4	93.1	98.3	98.3
85°	49.2	53.6	63.2	61.5	63.2
87.5°	18.4	26.3	29.0	27.2	27.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)