

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: P392876

Luminaire Tested: **12EN-LD2-31-UNV-L83050-W2A-1-U (3500K)**

Issue Date: 3/28/2020

Test Information

Test Method: LM-79-08
Report Number: P392876
Test Lab: INNOVATION CENTER (G2)
Issue Date: 3/28/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 12EN-LD2-31-UNV-L83050-W2A-1-U (3500K)
Description: 1X2 ENCOUNTER, 3100 LUMENS, VIVIDTUNE TUNABLE WHITE
Light Source: 2700K/6500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3126.0 lumens
Efficiency: N/A
Efficacy: 114.9 lumens/watt
Spacing Criteria (0/90/45): 1.28 / 1.27 / 1.4
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')
CIE Type: Direct

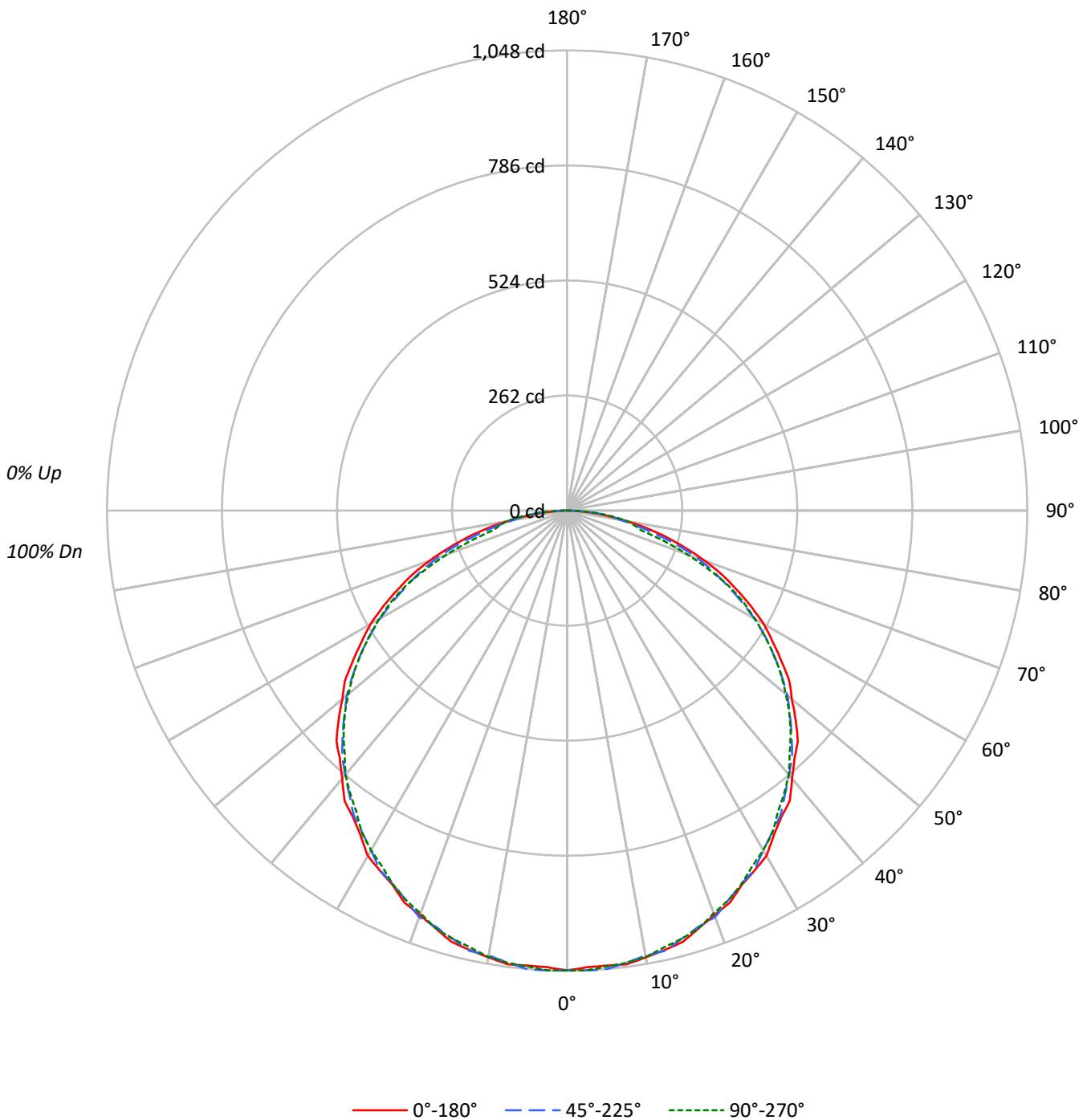
Input Watts (W): 27.2
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	104	99	95	106	101	97	94	97	94	91	93	90	88	89	87	85	83					83			
2	98	90	83	77	96	88	82	76	84	79	74	81	77	73	78	74	71	69					69			
3	89	79	70	64	87	77	69	63	74	67	62	71	66	61	69	64	60	58					58			
4	82	70	61	54	79	68	60	53	66	58	53	63	57	52	61	56	51	49					49			
5	75	62	53	46	73	61	52	46	59	51	45	57	50	45	55	49	44	42					42			
6	69	56	47	40	67	55	46	40	53	45	40	51	44	39	50	44	39	37					37			
7	64	50	42	35	62	50	41	35	48	40	35	47	40	35	45	39	34	32					32			
8	60	46	37	31	58	45	37	31	44	36	31	43	36	31	41	35	31	29					29			
9	56	42	34	28	54	42	34	28	40	33	28	39	33	28	38	32	28	26					26			
10	52	39	31	26	51	38	31	25	37	30	25	36	30	25	35	29	25	23					23			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5635	5635	5635
5°	5619	5662	5629
10°	5645	5623	5640
15°	5667	5622	5622
20°	5613	5641	5590
25°	5588	5570	5576
30°	5643	5550	5550
35°	5591	5565	5499
40°	5599	5522	5515
45°	5655	5503	5480
50°	5593	5484	5442
55°	5583	5395	5395
60°	5565	5296	5317
65°	5425	5107	5170
70°	5240	4957	4548
75°	4887	4408	3639
80°	4246	3812	4308
85°	3335	4137	4199



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	99.2	3.2
10°-20°	285.3	9.1
20°-30°	434.1	13.9
30°-40°	529.0	16.9
40°-50°	560.1	17.9
50°-60°	518.7	16.6
60°-70°	403.6	12.9
70°-80°	225.9	7.2
80°-90°	70.1	2.2
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°	818.6	26.2
0°-40°	1347.7	43.1
0°-60°	2426.5	77.6
0°-90°	3126.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3126.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1047	1047	1047	1047	1047	
5°	1040	1047	1048	1049	1042	99
15°	1017	1011	1009	1007	1009	286
25°	941	939	938	937	939	436
35°	851	851	847	842	837	535
45°	743	737	723	719	720	569
55°	595	590	575	572	575	533
65°	426	416	401	402	406	422
75°	235	227	212	190	175	247
85°	54	56	67	67	68	65
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1047	1047	1047	1047	1047
2.5°	1041	1045	1048	1048	1048
5°	1040	1047	1048	1049	1042
7.5°	1042	1037	1038	1036	1039
10°	1033	1028	1029	1031	1032
12.5°	1025	1026	1027	1026	1019
15°	1017	1011	1009	1007	1009
17.5°	997	993	994	995	997
20°	980	985	985	983	976
22.5°	967	966	960	957	960
25°	941	939	938	937	939
27.5°	924	924	923	919	913
30°	908	903	893	891	893
32.5°	876	872	869	865	870
35°	851	851	847	842	837
37.5°	833	827	815	811	812
40°	797	793	786	781	785
42.5°	766	765	758	752	750
45°	743	737	723	719	720
47.5°	706	700	688	684	687
50°	668	664	655	649	650
52.5°	638	630	615	613	614
55°	595	590	575	572	575
57.5°	555	549	535	529	534
60°	517	508	492	490	494
62.5°	472	465	446	447	453
65°	426	416	401	402	406
67.5°	382	371	359	353	348
70°	333	325	315	296	289
72.5°	282	275	266	237	232
75°	235	227	212	190	175
77.5°	185	181	163	153	158
80°	137	137	123	134	139
82.5°	92	91	101	106	105
85°	54	56	67	67	68
87.5°	23	26	31	32	32
90°	0	0	0	0	0

(END OF REPORT)