

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: P392812

Luminaire Tested: **12EN-LD2-23-UNV-L83050-W2A-1-U (3500K)**

Issue Date: 3/28/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P392812  
Test Lab: INNOVATION CENTER (G2)  
Issue Date: 3/28/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 12EN-LD2-23-UNV-L83050-W2A-1-U (3500K)  
Description: 1X2 ENCOUNTER, 2300 LUMENS, VIVIDTUNE TUNABLE WHITE  
Light Source: 2700K/6500K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2295.5 lumens  
Efficiency: N/A  
Efficacy: 117.7 lumens/watt  
Spacing Criteria (0/90/45): 1.28 / 1.26 / 1.39  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

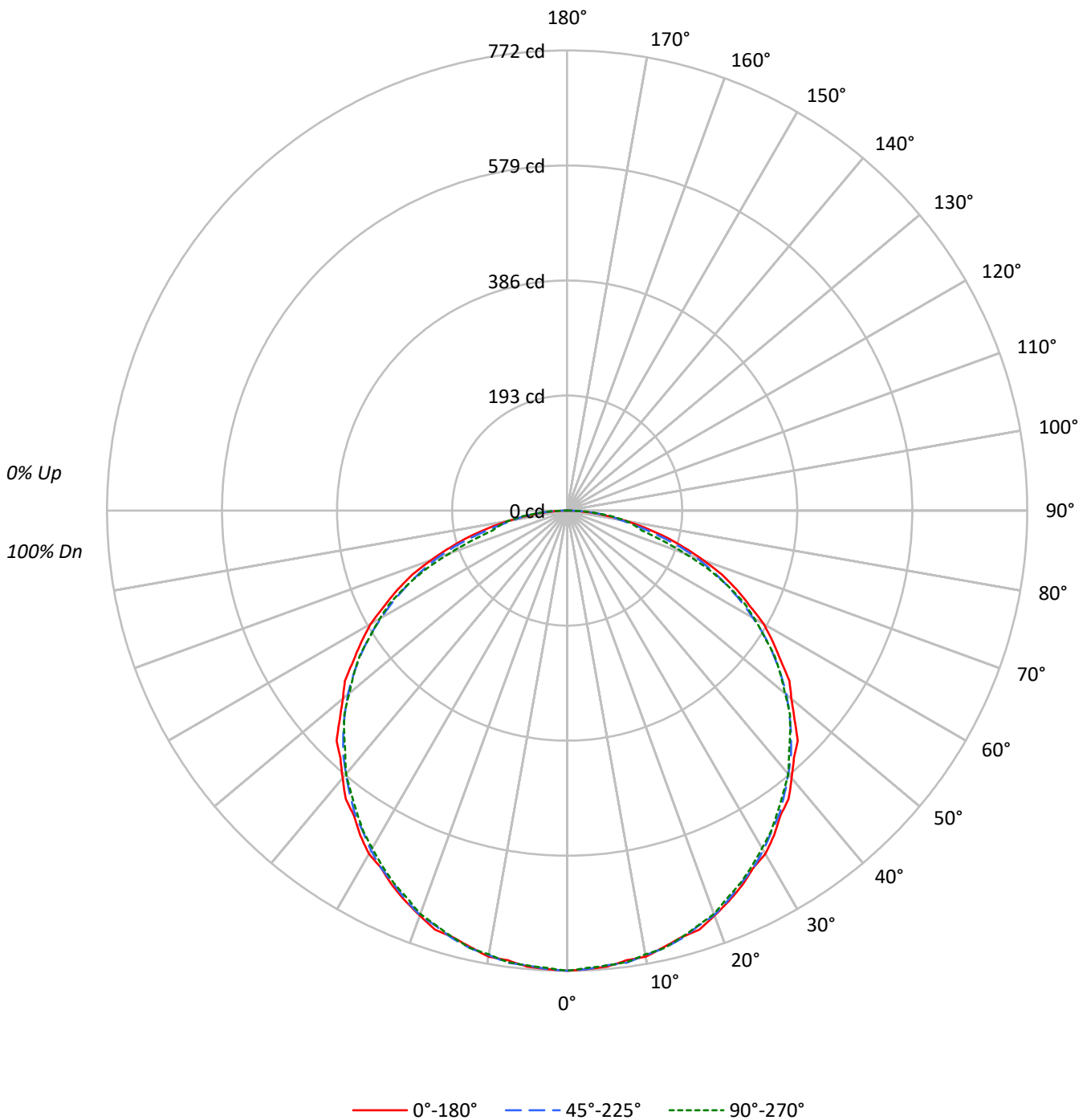
Input Watts (W): 19.5  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	4155	4155	4155
5°	4149	4138	4138
10°	4153	4137	4132
15°	4129	4140	4129
20°	4141	4135	4124
25°	4121	4097	4092
30°	4133	4089	4064
35°	4100	4080	4047
40°	4117	4054	4054
45°	4163	4042	4026
50°	4111	4019	3994
55°	4100	3969	3988
60°	4101	3875	3907
65°	3999	3757	3769
70°	3824	3635	3289
75°	3556	3223	2703
80°	3099	2789	3130
85°	2470	2964	3026



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	72.9	3.2
10°-20°	209.6	9.1
20°-30°	318.9	13.9
30°-40°	388.5	16.9
40°-50°	411.6	17.9
50°-60°	381.2	16.6
60°-70°	296.5	12.9
70°-80°	165.2	7.2
80°-90°	51.1	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°	601.4	26.2
0°-40°	989.9	43.1
0°-60°	1782.6	77.7
0°-90°	2295.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2295.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	772	772	772	772	772	
5°	768	765	766	768	766	73
15°	741	744	743	743	741	210
25°	694	694	690	688	689	320
35°	624	624	621	618	616	393
45°	547	538	531	527	529	418
55°	437	433	423	420	425	392
65°	314	307	295	298	296	310
75°	171	166	155	139	130	180
85°	40	41	48	49	49	47
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	772	772	772	772	772
2.5°	770	770	770	770	768
5°	768	765	766	768	766
7.5°	761	764	765	765	764
10°	760	757	757	757	756
12.5°	750	751	752	752	752
15°	741	744	743	743	741
17.5°	737	732	731	731	730
20°	723	721	722	720	720
22.5°	709	708	707	706	703
25°	694	694	690	688	689
27.5°	676	678	676	674	672
30°	665	660	658	656	654
32.5°	646	644	638	635	637
35°	624	624	621	618	616
37.5°	610	604	599	596	596
40°	586	586	577	573	577
42.5°	563	563	556	554	551
45°	547	538	531	527	529
47.5°	517	515	506	503	507
50°	491	490	480	478	477
52.5°	470	461	452	449	451
55°	437	433	423	420	425
57.5°	409	405	393	391	391
60°	381	372	360	358	363
62.5°	345	341	328	329	334
65°	314	307	295	298	296
67.5°	281	273	263	259	256
70°	243	238	231	217	209
72.5°	205	201	194	174	168
75°	171	166	155	139	130
77.5°	134	134	119	112	116
80°	100	101	90	98	101
82.5°	68	67	74	77	77
85°	40	41	48	49	49
87.5°	16	19	22	23	24
90°	0	0	0	0	0

(END OF REPORT)