

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: P392844

Luminaire Tested: **12EN-LD2-27-UNV-L83050-W2A-1-U (3500K)**

Issue Date: 3/28/2020

Test Information

Test Method: LM-79-08
Report Number: P392844
Test Lab: INNOVATION CENTER (G2)
Issue Date: 3/28/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 12EN-LD2-27-UNV-L83050-W2A-1-U (3500K)
Description: 1X2 ENCOUNTER, 2700 LUMENS, VIVIDTUNE TUNABLE WHITE
Light Source: 2700K/6500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2748.6 lumens
Efficiency: N/A
Efficacy: 116.5 lumens/watt
Spacing Criteria (0/90/45): 1.28 / 1.26 / 1.4
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')
CIE Type: Direct

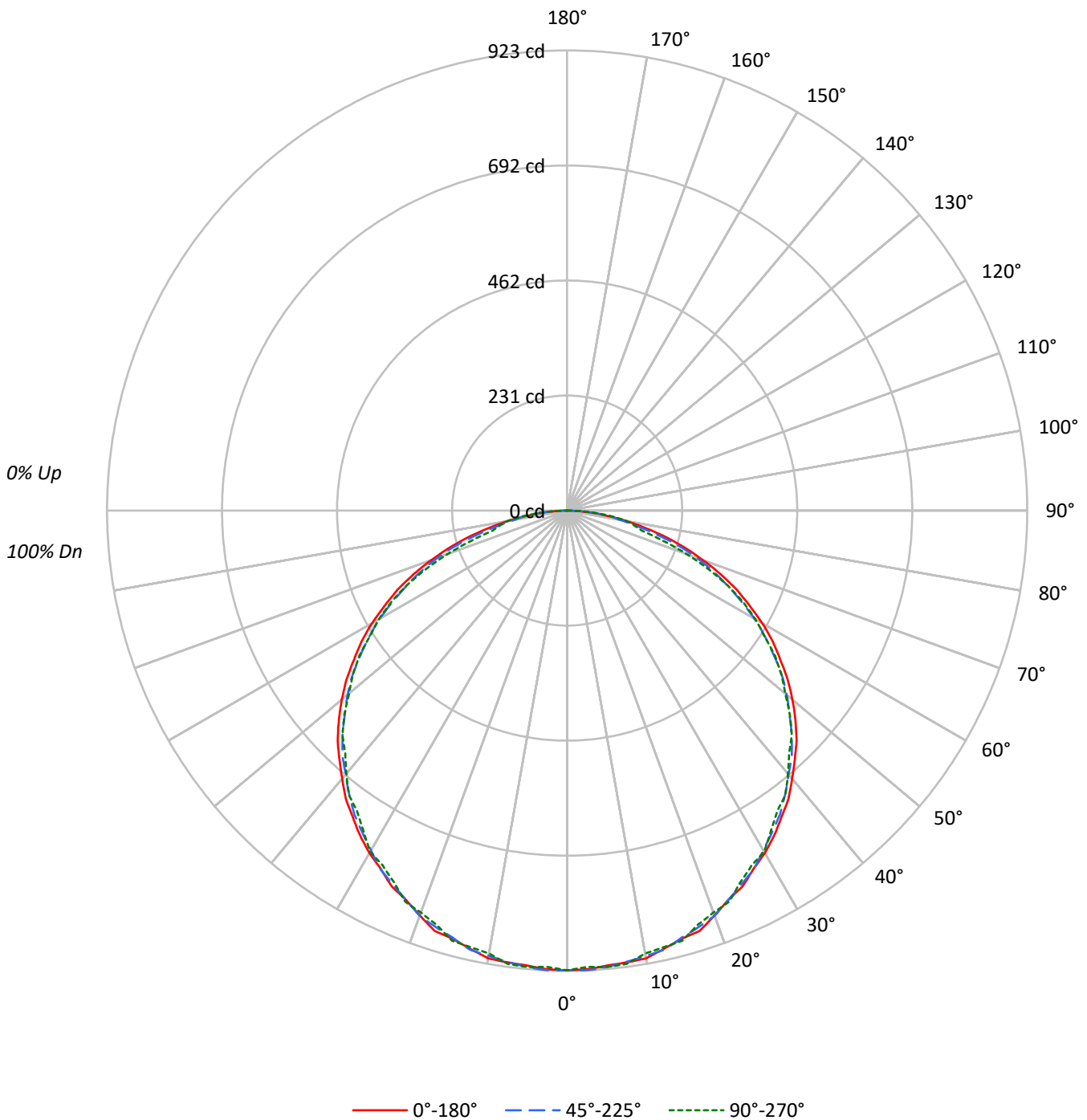
Input Watts (W): 23.6
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	4962	4962	4962
5°	4949	4965	4965
10°	4984	4957	4929
15°	4953	4942	4976
20°	4948	4954	4914
25°	4941	4911	4881
30°	4928	4891	4909
35°	4928	4888	4829
40°	4932	4855	4841
45°	4955	4848	4848
50°	4940	4814	4781
55°	4898	4748	4776
60°	4865	4672	4693
65°	4776	4508	4521
70°	4548	4343	4013
75°	4242	3868	3202
80°	3750	3316	3781
85°	2964	3520	3643



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	87.3	3.2
10°-20°	250.9	9.1
20°-30°	381.7	13.9
30°-40°	465.2	16.9
40°-50°	492.9	17.9
50°-60°	456.5	16.6
60°-70°	354.8	12.9
70°-80°	198.1	7.2
80°-90°	61.2	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°	719.9	26.2
0°-40°	1185.1	43.1
0°-60°	2134.5	77.7
0°-90°	2748.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2748.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	922	922	922	922	922	
5°	916	919	919	919	919	87
15°	889	888	887	886	893	252
25°	832	830	827	826	822	383
35°	750	747	744	740	735	470
45°	651	645	637	631	637	501
55°	522	520	506	503	509	468
65°	375	367	354	355	355	369
75°	204	199	186	167	154	215
85°	48	49	57	59	59	57
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	922	922	922	922	922
2.5°	921	920	923	921	916
5°	916	919	919	919	919
7.5°	914	912	913	914	917
10°	912	906	907	906	902
12.5°	900	900	902	900	897
15°	889	888	887	886	893
17.5°	884	876	876	877	871
20°	864	864	865	862	858
22.5°	845	848	845	841	849
25°	832	830	827	826	822
27.5°	810	812	811	807	802
30°	793	791	787	782	790
32.5°	773	770	765	762	761
35°	750	747	744	740	735
37.5°	729	724	718	712	719
40°	702	700	691	687	689
42.5°	676	674	667	662	659
45°	651	645	637	631	637
47.5°	621	617	605	603	606
50°	590	585	575	572	571
52.5°	558	554	543	537	542
55°	522	520	506	503	509
57.5°	489	483	471	468	469
60°	452	447	434	430	436
62.5°	412	407	393	392	398
65°	375	367	354	355	355
67.5°	333	327	316	311	306
70°	289	285	276	260	255
72.5°	247	242	234	207	202
75°	204	199	186	167	154
77.5°	161	160	142	135	138
80°	121	120	107	118	122
82.5°	82	80	87	93	92
85°	48	49	57	59	59
87.5°	19	22	26	29	28
90°	0	0	0	0	0

(END OF REPORT)