

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: P392821

Luminaire Tested: **12EN-LD2-23-UNV-L92765-W2A-1-U (4000K)**

Issue Date: 3/28/2020

Test Information

Test Method: LM-79-08
Report Number: P392821
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-563-36)
Test Lab: INNOVATION CENTER
Issue Date: 3/28/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 12EN-LD2-23-UNV-L92765-W2A-1-U (4000K)
Description: 1X2 ENCOUNTER, 2300 LUMENS, VIVIDTUNE TUNABLE WHITE
Light Source: 2700K/6500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1898.4 lumens
Efficiency: N/A
Efficacy: 98.9 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

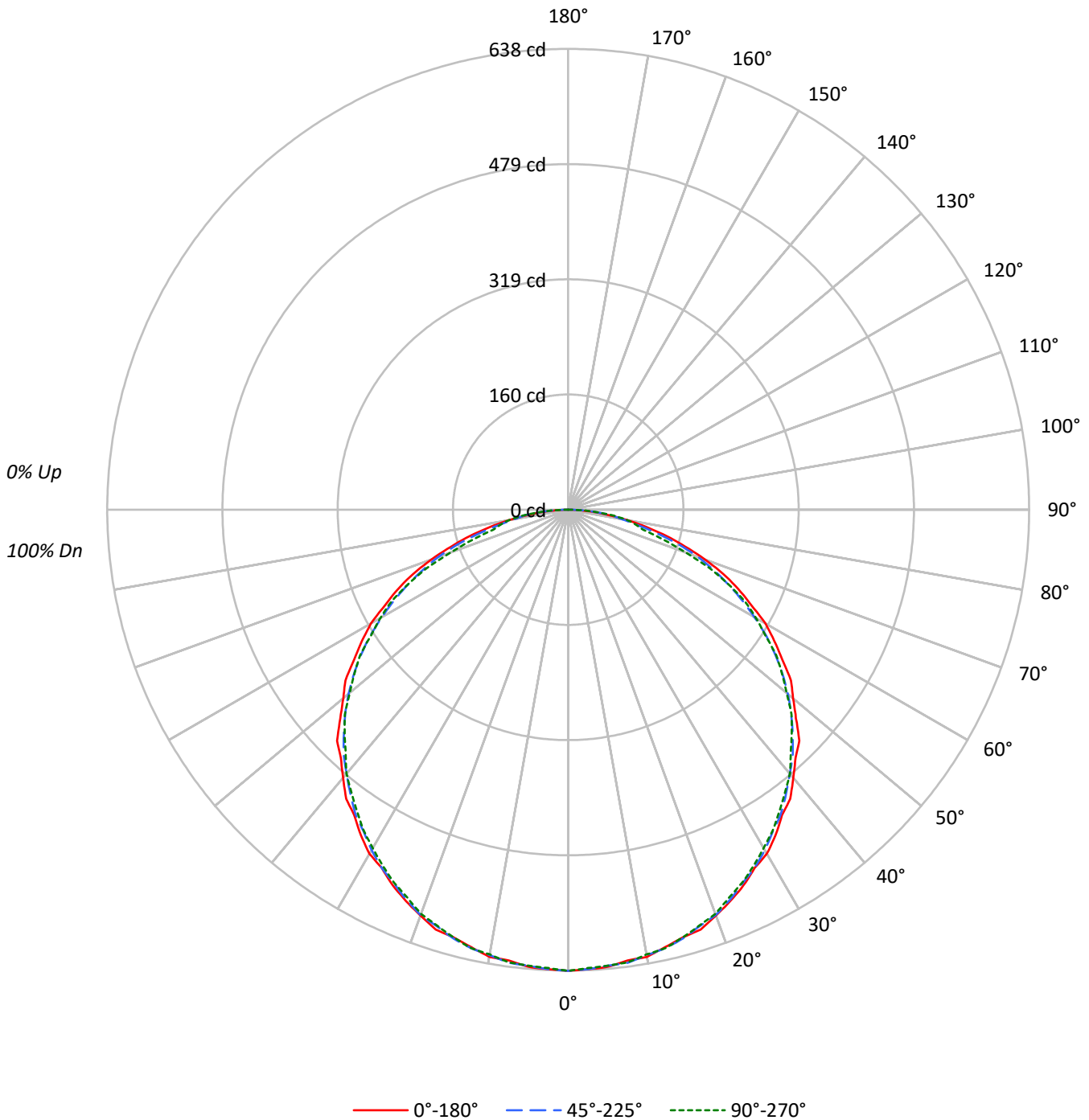
Input Watts (W): 19.2
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	3436	3436	3436
5°	3432	3422	3422
10°	3435	3422	3417
15°	3414	3424	3414
20°	3424	3420	3411
25°	3409	3389	3384
30°	3418	3382	3361
35°	3391	3374	3347
40°	3405	3353	3353
45°	3443	3343	3330
50°	3400	3324	3303
55°	3391	3282	3298
60°	3392	3204	3231
65°	3307	3107	3117
70°	3163	3006	2721
75°	2940	2666	2235
80°	2563	2306	2588
85°	2044	2452	2501



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	60.3	3.2
10°-20°	173.3	9.1
20°-30°	263.7	13.9
30°-40°	321.3	16.9
40°-50°	340.4	17.9
50°-60°	315.2	16.6
60°-70°	245.2	12.9
70°-80°	136.6	7.2
80°-90°	42.3	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°	497.4	26.2
0°-40°	818.7	43.1
0°-60°	1474.3	77.7
0°-90°	1898.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1898.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	638	638	638	638	638	
5°	635	633	634	635	634	60
15°	613	615	614	614	613	174
25°	574	574	571	569	570	265
35°	516	516	514	511	510	325
45°	452	445	439	436	438	346
55°	361	358	350	347	352	324
65°	260	254	244	246	245	256
75°	141	137	128	115	108	149
85°	33	34	40	40	40	39
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	638.5	638.5	638.5	638.5	638.5
2.5°	636.8	636.8	636.8	636.8	635.2
5°	635.2	632.7	633.5	635.2	633.5
7.5°	629.4	631.9	632.7	632.7	631.9
10°	628.5	626.1	626.1	626.1	625.2
12.5°	620.3	621.1	621.9	621.9	621.9
15°	612.8	615.3	614.5	614.5	612.8
17.5°	609.5	605.4	604.6	604.6	603.7
20°	597.9	596.3	597.1	595.5	595.5
22.5°	586.4	585.5	584.7	583.9	581.4
25°	574.0	574.0	570.7	569.0	569.8
27.5°	559.1	560.7	559.1	557.4	555.8
30°	550.0	545.8	544.2	542.5	540.9
32.5°	534.3	532.6	527.6	525.2	526.8
35°	516.1	516.1	513.6	511.1	509.5
37.5°	504.5	499.5	495.4	492.9	492.9
40°	484.6	484.6	477.2	473.9	477.2
42.5°	465.6	465.6	459.8	458.2	455.7
45°	452.4	444.9	439.2	435.8	437.5
47.5°	427.6	425.9	418.5	416.0	419.3
50°	406.1	405.2	397.0	395.3	394.5
52.5°	388.7	381.3	373.8	371.3	373.0
55°	361.4	358.1	349.8	347.4	351.5
57.5°	338.3	334.9	325.0	323.4	323.4
60°	315.1	307.7	297.7	296.1	300.2
62.5°	285.3	282.0	271.3	272.1	276.2
65°	259.7	253.9	244.0	246.5	244.8
67.5°	232.4	225.8	217.5	214.2	211.7
70°	201.0	196.8	191.0	179.5	172.9
72.5°	169.5	166.2	160.4	143.9	138.9
75°	141.4	137.3	128.2	115.0	107.5
77.5°	110.8	110.8	98.4	92.6	95.9
80°	82.7	83.5	74.4	81.0	83.5
82.5°	56.2	55.4	61.2	63.7	63.7
85°	33.1	33.9	39.7	40.5	40.5
87.5°	13.2	15.7	18.2	19.0	19.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)