

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: P392869

Luminaire Tested: **12EN-LD2-31-UNV-L82765-W2A-1-U (4000K)**

Issue Date: 3/28/2020

Test Information

Test Method: LM-79-08
Report Number: P392869
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-563-38)
Test Lab: INNOVATION CENTER
Issue Date: 3/28/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 12EN-LD2-31-UNV-L82765-W2A-1-U (4000K)
Description: 1X2 ENCOUNTER, 3100 LUMENS, VIVIDTUNE TUNABLE WHITE
Light Source: 3000K/5000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2920.2 lumens
Efficiency: N/A
Efficacy: 108.6 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

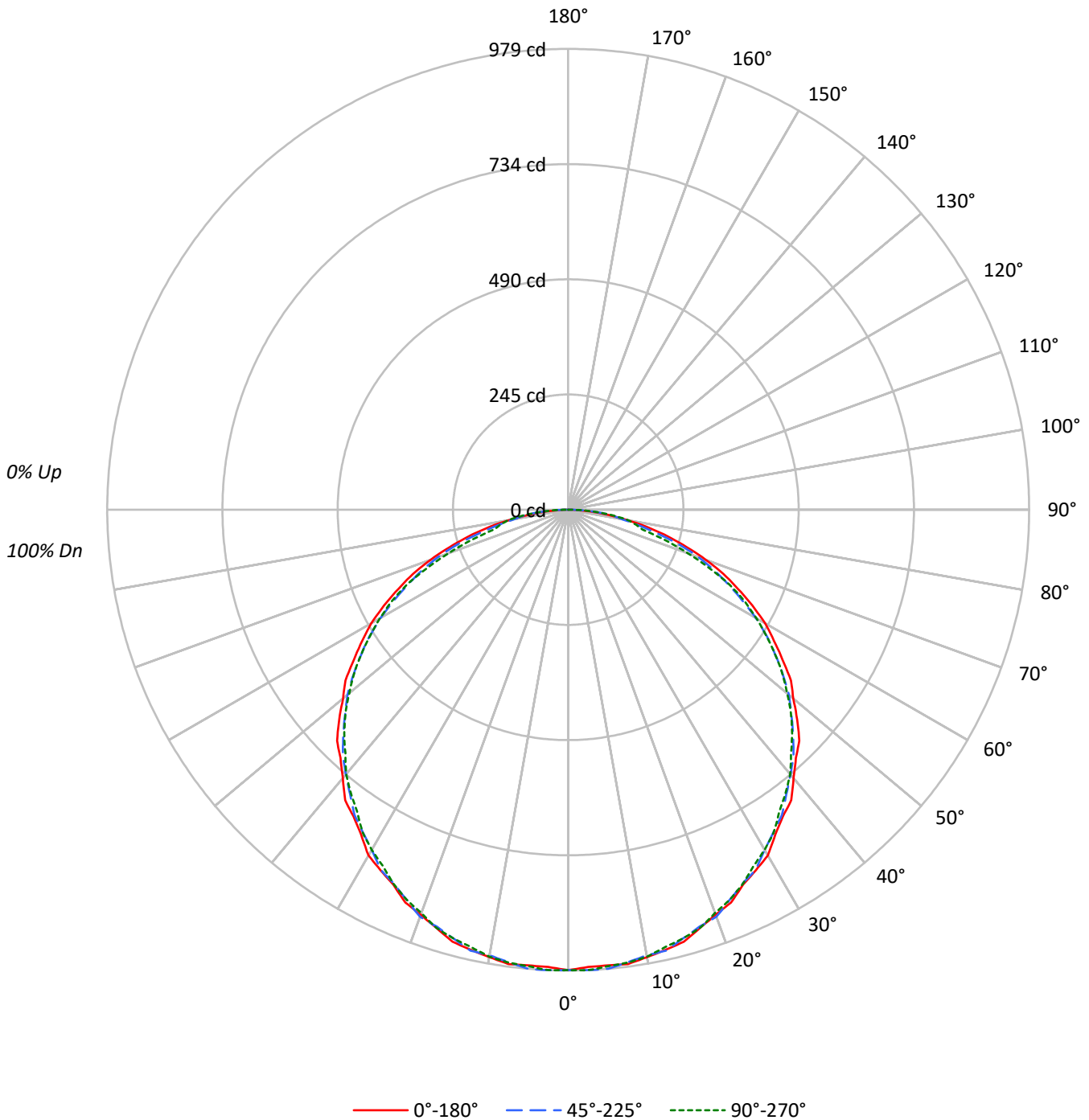
Input Watts (W): 26.9
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	5264	5264	5264
5°	5249	5289	5259
10°	5274	5253	5268
15°	5293	5252	5252
20°	5243	5270	5222
25°	5220	5203	5209
30°	5271	5184	5184
35°	5223	5198	5137
40°	5231	5158	5152
45°	5283	5141	5119
50°	5225	5123	5084
55°	5215	5040	5040
60°	5199	4947	4968
65°	5067	4770	4830
70°	4895	4631	4249
75°	4564	4117	3400
80°	3967	3561	4023
85°	3112	3866	3921



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	92.7	3.2
10°-20°	266.5	9.1
20°-30°	405.5	13.9
30°-40°	494.2	16.9
40°-50°	523.3	17.9
50°-60°	484.5	16.6
60°-70°	377.0	12.9
70°-80°	211.0	7.2
80°-90°	65.4	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°	764.7	26.2
0°-40°	1258.9	43.1
0°-60°	2266.7	77.6
0°-90°	2920.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2920.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	978	978	978	978	978	
5°	972	978	979	980	973	93
15°	950	944	943	941	943	267
25°	879	877	876	875	877	407
35°	795	795	791	787	782	499
45°	694	688	675	672	673	532
55°	556	551	537	534	537	498
65°	398	389	375	376	379	394
75°	220	212	198	178	164	231
85°	50	52	63	63	64	60
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	978.1	978.1	978.1	978.1	978.1
2.5°	972.4	976.2	979.0	979.0	979.0
5°	971.5	978.1	979.0	979.9	973.4
7.5°	973.4	968.7	969.6	967.8	970.6
10°	965.0	960.3	961.2	963.1	964.0
12.5°	957.5	958.4	959.4	958.4	951.9
15°	950.0	944.4	942.6	940.7	942.6
17.5°	931.3	927.6	928.5	929.5	931.3
20°	915.5	920.1	920.1	918.3	911.7
22.5°	903.3	902.4	896.8	894.0	896.8
25°	879.0	877.2	876.2	875.3	877.2
27.5°	863.2	863.2	862.2	858.5	852.9
30°	848.2	843.5	834.2	832.3	834.2
32.5°	818.3	814.6	811.8	808.0	812.7
35°	795.0	795.0	791.2	786.6	781.9
37.5°	778.1	772.5	761.3	757.6	758.5
40°	744.5	740.8	734.2	729.6	733.3
42.5°	715.6	714.6	708.1	702.5	700.6
45°	694.1	688.5	675.4	671.7	672.6
47.5°	659.5	653.9	642.7	639.0	641.8
50°	624.0	620.3	611.9	606.3	607.2
52.5°	596.0	588.5	574.5	572.6	573.6
55°	555.8	551.1	537.1	534.3	537.1
57.5°	518.5	512.8	499.8	494.2	498.8
60°	483.0	474.5	459.6	457.7	461.5
62.5°	440.9	434.4	416.6	417.6	423.2
65°	397.9	388.6	374.6	375.5	379.3
67.5°	356.8	346.6	335.4	329.8	325.1
70°	311.1	303.6	294.3	276.5	270.0
72.5°	263.4	256.9	248.5	221.4	216.7
75°	219.5	212.1	198.0	177.5	163.5
77.5°	172.8	169.1	152.3	142.9	147.6
80°	128.0	128.0	114.9	125.2	129.8
82.5°	85.9	85.0	94.3	99.0	98.1
85°	50.4	52.3	62.6	62.6	63.5
87.5°	21.5	24.3	29.0	29.9	29.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)