

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: P392868

Luminaire Tested: **12EN-LD2-31-UNV-L82765-W2A-1-U (3500K)**

Issue Date: 3/28/2020

Test Information

Test Method: LM-79-08
Report Number: P392868
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 (3500K)
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: 2960.7 lumens
Efficiency: N/A
Efficacy: 110.1 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

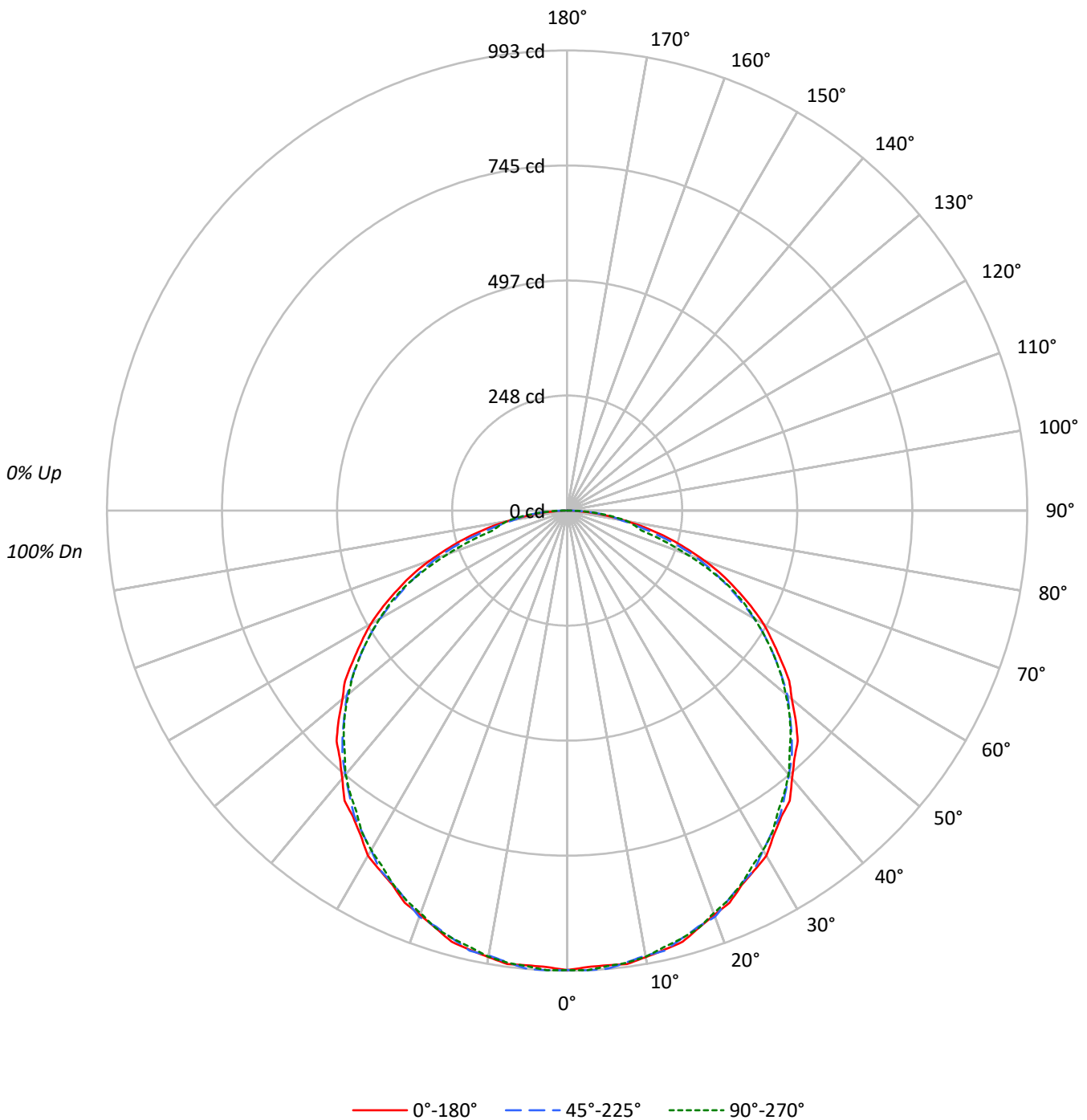
Input Watts (W): 26.9
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	5337	5337	5337
5°	5321	5363	5332
10°	5347	5326	5341
15°	5367	5324	5324
20°	5316	5343	5294
25°	5292	5276	5281
30°	5345	5256	5256
35°	5296	5271	5208
40°	5303	5230	5224
45°	5356	5212	5190
50°	5297	5195	5154
55°	5287	5110	5110
60°	5271	5016	5036
65°	5138	4837	4897
70°	4963	4694	4307
75°	4629	4175	3446
80°	4023	3611	4079
85°	3155	3921	3977



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	94.0	3.2
10°-20°	270.2	9.1
20°-30°	411.1	13.9
30°-40°	501.1	16.9
40°-50°	530.5	17.9
50°-60°	491.3	16.6
60°-70°	382.3	12.9
70°-80°	213.9	7.2
80°-90°	66.4	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°	775.3	26.2
0°-40°	1276.4	43.1
0°-60°	2298.1	77.6
0°-90°	2960.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2960.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	992	992	992	992	992	
5°	985	992	993	994	987	94
15°	963	958	956	954	956	271
25°	891	889	888	887	889	413
35°	806	806	802	798	793	506
45°	704	698	685	681	682	539
55°	564	559	545	542	545	504
65°	404	394	380	381	384	400
75°	223	215	201	180	166	234
85°	51	53	64	64	64	61
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	991.6	991.6	991.6	991.6	991.6
2.5°	985.9	989.7	992.6	992.6	992.6
5°	985.0	991.6	992.6	993.5	986.9
7.5°	986.9	982.2	983.1	981.2	984.1
10°	978.4	973.6	974.6	976.5	977.4
12.5°	970.8	971.7	972.7	971.7	965.1
15°	963.2	957.5	955.6	953.7	955.6
17.5°	944.3	940.5	941.4	942.4	944.3
20°	928.2	932.9	932.9	931.0	924.4
22.5°	915.9	914.9	909.2	906.4	909.2
25°	891.2	889.3	888.4	887.4	889.3
27.5°	875.1	875.1	874.2	870.4	864.7
30°	860.0	855.2	845.8	843.9	845.8
32.5°	829.7	825.9	823.0	819.3	824.0
35°	806.0	806.0	802.2	797.5	792.7
37.5°	788.9	783.3	771.9	768.1	769.1
40°	754.8	751.1	744.4	739.7	743.5
42.5°	725.5	724.5	717.9	712.2	710.3
45°	703.7	698.0	684.8	681.0	681.9
47.5°	668.7	663.0	651.6	647.8	650.7
50°	632.7	628.9	620.4	614.7	615.6
52.5°	604.3	596.7	582.5	580.6	581.5
55°	563.5	558.8	544.6	541.7	544.6
57.5°	525.6	520.0	506.7	501.0	505.8
60°	489.7	481.1	466.0	464.1	467.9
62.5°	447.0	440.4	422.4	423.4	429.0
65°	403.5	394.0	379.8	380.7	384.5
67.5°	361.8	351.4	340.0	334.3	329.6
70°	315.4	307.8	298.3	280.3	273.7
72.5°	267.1	260.5	251.9	224.5	219.7
75°	222.6	215.0	200.8	180.0	165.7
77.5°	175.2	171.4	154.4	144.9	149.6
80°	129.8	129.8	116.5	126.9	131.6
82.5°	87.1	86.2	95.7	100.4	99.4
85°	51.1	53.0	63.5	63.5	64.4
87.5°	21.8	24.6	29.4	30.3	30.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)