

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: P392893

Luminaire Tested: **12EN-LD2-31-UNV-L93050-W2A-1-U (4000K)**

Issue Date: 3/28/2020

Test Information

Test Method: LM-79-08
Report Number: P392893
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-L93050-W2A-1-U (4000K)
Description: 1X2 ENCOUNTER, 3100 LUMENS, VIVIDTUNE TUNABLE WHITE
Light Source: 2700K/6500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2730.6 lumens
Efficiency: N/A
Efficacy: 102.7 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

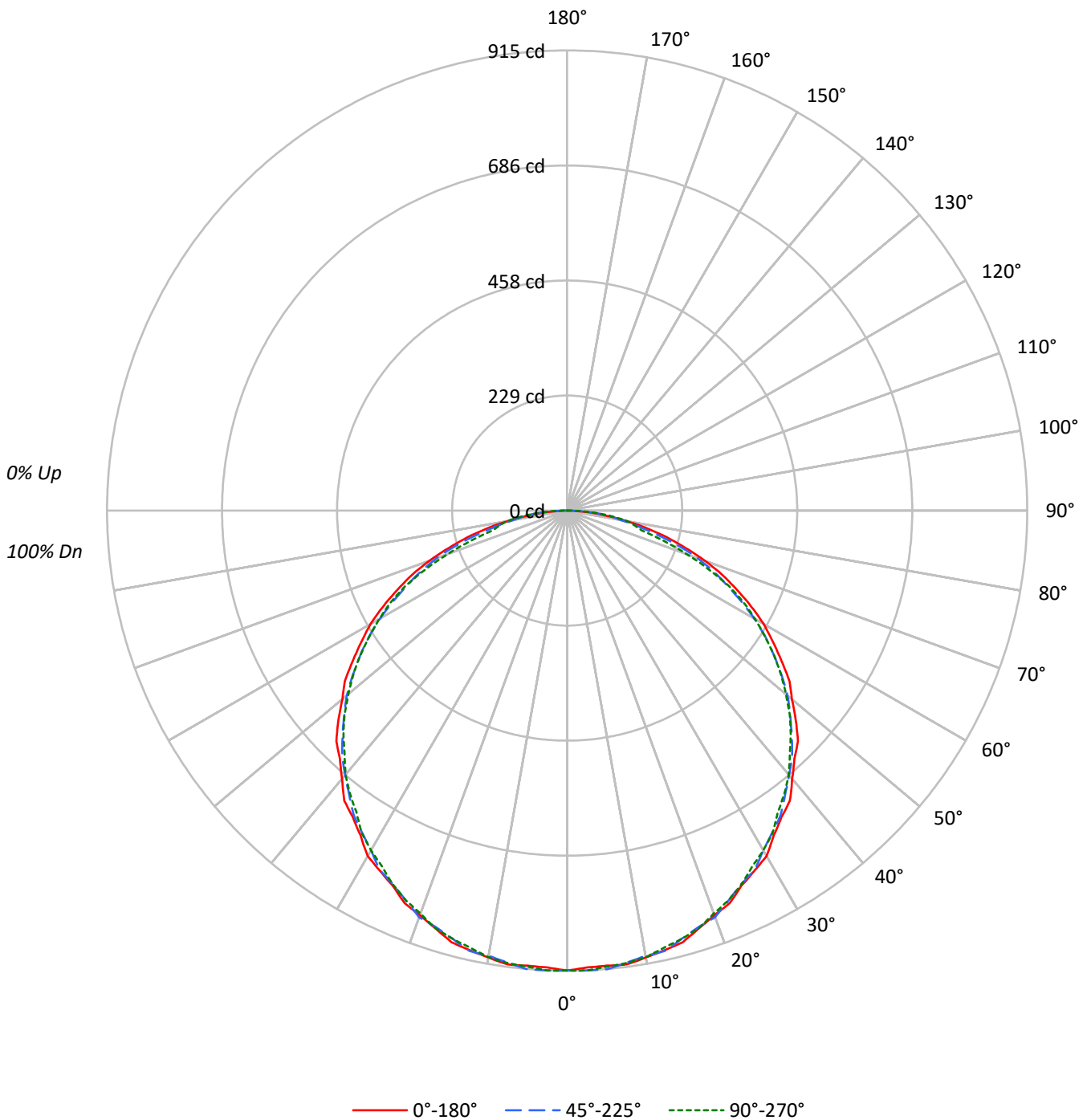
Input Watts (W): 26.6
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	4922	4922	4922
5°	4908	4945	4917
10°	4931	4912	4927
15°	4950	4911	4911
20°	4903	4928	4883
25°	4881	4865	4871
30°	4929	4847	4847
35°	4884	4861	4803
40°	4891	4824	4817
45°	4940	4806	4787
50°	4886	4790	4754
55°	4876	4713	4713
60°	4861	4626	4645
65°	4739	4461	4516
70°	4578	4330	3972
75°	4269	3851	3179
80°	3710	3329	3763
85°	2915	3612	3668



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	86.7	3.2
10°-20°	249.2	9.1
20°-30°	379.2	13.9
30°-40°	462.1	16.9
40°-50°	489.3	17.9
50°-60°	453.1	16.6
60°-70°	352.6	12.9
70°-80°	197.3	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°	715.1	26.2
0°-40°	1177.2	43.1
0°-60°	2119.5	77.6
0°-90°	2730.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2730.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	915	915	915	915	915	
5°	908	915	915	916	910	87
15°	888	883	881	880	881	250
25°	822	820	819	818	820	381
35°	743	743	740	736	731	467
45°	649	644	632	628	629	497
55°	520	515	502	500	502	465
65°	372	363	350	351	355	369
75°	205	198	185	166	153	216
85°	47	49	58	58	59	56
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	914.6	914.6	914.6	914.6	914.6
2.5°	909.3	912.8	915.4	915.4	915.4
5°	908.4	914.6	915.4	916.3	910.2
7.5°	910.2	905.8	906.7	905.0	907.6
10°	902.3	898.0	898.8	900.6	901.5
12.5°	895.3	896.2	897.1	896.2	890.1
15°	888.4	883.1	881.4	879.6	881.4
17.5°	870.9	867.4	868.3	869.1	870.9
20°	856.0	860.4	860.4	858.7	852.5
22.5°	844.7	843.8	838.6	835.9	838.6
25°	822.0	820.2	819.3	818.5	820.2
27.5°	807.1	807.1	806.2	802.8	797.5
30°	793.1	788.8	780.0	778.3	780.0
32.5°	765.2	761.7	759.1	755.6	760.0
35°	743.4	743.4	739.9	735.5	731.1
37.5°	727.6	722.4	711.9	708.4	709.3
40°	696.2	692.7	686.6	682.2	685.7
42.5°	669.1	668.2	662.1	656.9	655.1
45°	649.0	643.8	631.5	628.1	628.9
47.5°	616.7	611.5	601.0	597.5	600.1
50°	583.5	580.0	572.1	566.9	567.8
52.5°	557.3	550.3	537.2	535.5	536.3
55°	519.7	515.4	502.3	499.6	502.3
57.5°	484.8	479.6	467.3	462.1	466.5
60°	451.6	443.7	429.8	428.0	431.5
62.5°	412.3	406.2	389.6	390.5	395.7
65°	372.1	363.4	350.3	351.1	354.6
67.5°	333.7	324.1	313.6	308.3	304.0
70°	290.9	283.9	275.2	258.6	252.4
72.5°	246.3	240.2	232.4	207.0	202.7
75°	205.3	198.3	185.2	166.0	152.9
77.5°	161.6	158.1	142.4	133.6	138.0
80°	119.7	119.7	107.4	117.0	121.4
82.5°	80.4	79.5	88.2	92.6	91.7
85°	47.2	48.9	58.5	58.5	59.4
87.5°	20.1	22.7	27.1	28.0	28.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)