

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: P392846

Luminaire Tested: **12EN-LD2-27-UNV-L83050-W2A-1-U (4500K)**

Issue Date: 3/28/2020

Test Information

Test Method: LM-79-08
Report Number: P392846
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-563-37)
Test Lab: INNOVATION CENTER
Issue Date: 3/28/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 12EN-LD2-27-UNV-L83050-W2A-1-U (4500K)
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: 2797.5 lumens
Efficiency: N/A
Efficacy: 120.1 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

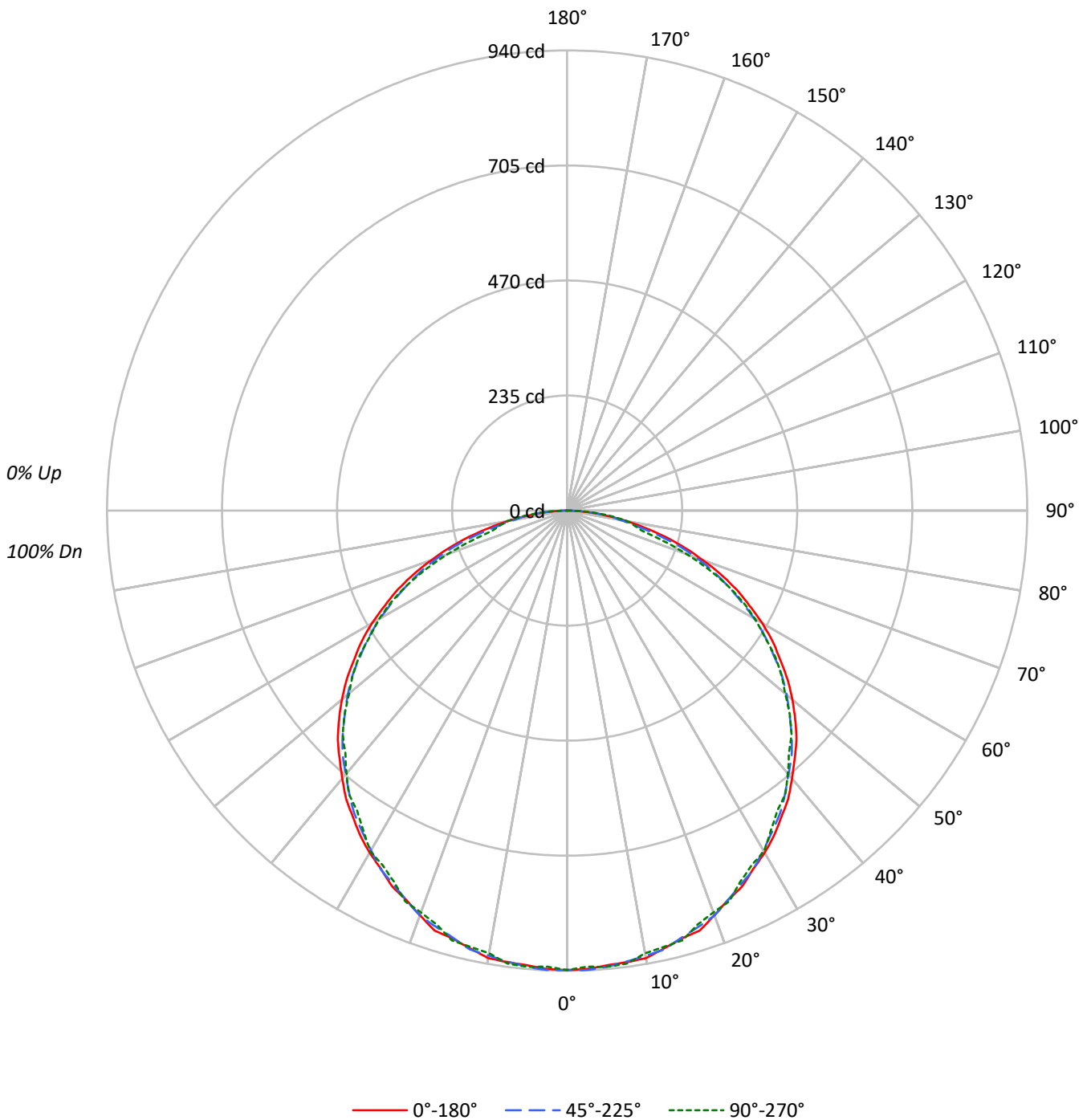
Input Watts (W): 23.3
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	5050	5050	5050
5°	5037	5054	5054
10°	5073	5045	5017
15°	5041	5030	5064
20°	5037	5042	5002
25°	5029	4998	4969
30°	5016	4978	4997
35°	5016	4976	4915
40°	5020	4941	4927
45°	5043	4935	4935
50°	5028	4900	4866
55°	4985	4832	4861
60°	4952	4754	4777
65°	4861	4588	4601
70°	4629	4420	4083
75°	4317	3936	3258
80°	3818	3375	3849
85°	3020	3582	3711



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	88.8	3.2
10°-20°	255.4	9.1
20°-30°	388.5	13.9
30°-40°	473.5	16.9
40°-50°	501.7	17.9
50°-60°	464.7	16.6
60°-70°	361.1	12.9
70°-80°	201.6	7.2
80°-90°	62.3	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°	732.7	26.2
0°-40°	1206.2	43.1
0°-60°	2172.6	77.7
0°-90°	2797.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2797.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	938	938	938	938	938	
5°	932	935	935	935	935	89
15°	905	904	903	902	909	256
25°	847	845	842	841	837	390
35°	763	760	757	753	748	478
45°	663	656	648	642	648	510
55°	531	529	515	512	518	476
65°	382	374	360	361	361	375
75°	208	202	189	170	157	219
85°	49	50	58	60	60	58
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	938.4	938.4	938.4	938.4	938.4
2.5°	937.4	936.4	939.5	937.4	932.3
5°	932.3	935.4	935.4	935.4	935.4
7.5°	930.3	928.3	929.3	930.3	933.3
10°	928.3	922.1	923.2	922.1	918.1
12.5°	916.0	916.0	918.1	916.0	913.0
15°	904.8	903.8	902.8	901.8	908.9
17.5°	899.8	891.6	891.6	892.6	886.5
20°	879.4	879.4	880.4	877.4	873.3
22.5°	860.1	863.1	860.1	856.0	864.1
25°	846.8	844.8	841.7	840.7	836.7
27.5°	824.4	826.5	825.5	821.4	816.3
30°	807.1	805.1	801.0	795.9	804.1
32.5°	786.8	783.7	778.6	775.6	774.6
35°	763.4	760.3	757.3	753.2	748.1
37.5°	742.0	736.9	730.8	724.7	731.8
40°	714.5	712.5	703.3	699.2	701.3
42.5°	688.0	686.0	678.9	673.8	670.7
45°	662.6	656.5	648.4	642.2	648.4
47.5°	632.1	628.0	615.8	613.7	616.8
50°	600.5	595.4	585.2	582.2	581.2
52.5°	567.9	563.9	552.7	546.6	551.7
55°	531.3	529.3	515.0	512.0	518.1
57.5°	497.7	491.6	479.4	476.3	477.4
60°	460.1	455.0	441.7	437.7	443.8
62.5°	419.3	414.3	400.0	399.0	405.1
65°	381.7	373.5	360.3	361.3	361.3
67.5°	338.9	332.8	321.6	316.5	311.5
70°	294.2	290.1	280.9	264.6	259.5
72.5°	251.4	246.3	238.2	210.7	205.6
75°	207.6	202.5	189.3	170.0	156.7
77.5°	163.9	162.9	144.5	137.4	140.5
80°	123.2	122.1	108.9	120.1	124.2
82.5°	83.5	81.4	88.6	94.7	93.6
85°	48.9	49.9	58.0	60.1	60.1
87.5°	19.3	22.4	26.5	29.5	28.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)