

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: P392806

Luminaire Tested: **12EN-LD2-23-UNV-L82765-W2A-1-U (4500K)**

Issue Date: 3/28/2020

Test Information

Test Method: LM-79-08
Report Number: P392806
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-L82765-W2A-1-U (4500K)
Description: 1X2 ENCOUNTER, 2300 LUMENS, VIVIDTUNE TUNABLE WHITE
Light Source: 3000K/5000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2207.9 lumens
Efficiency: N/A
Efficacy: 115.0 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

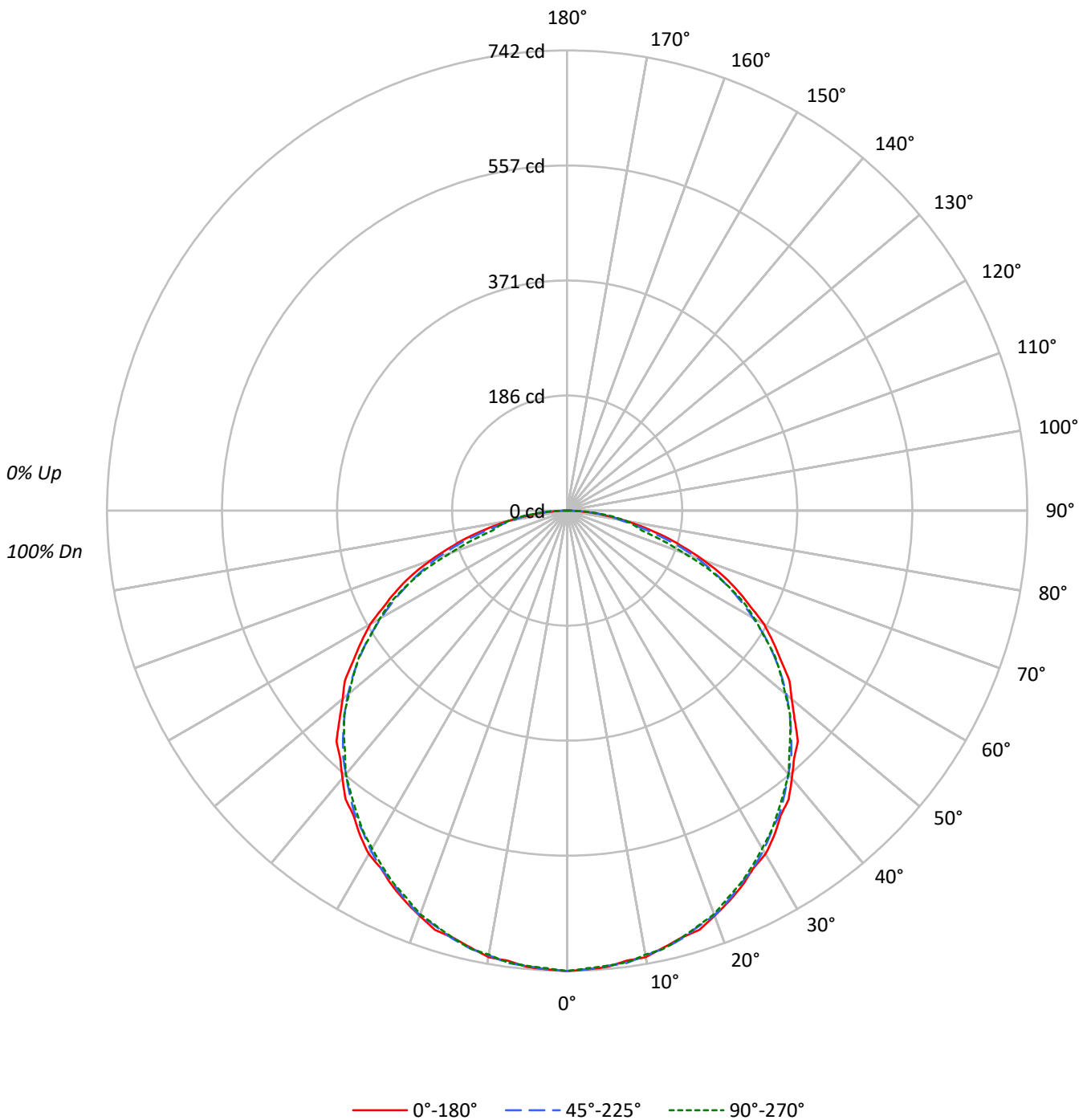
Input Watts (W): 19.2
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	3996	3996	3996
5°	3991	3981	3981
10°	3995	3979	3974
15°	3971	3982	3971
20°	3983	3977	3966
25°	3964	3941	3935
30°	3975	3933	3909
35°	3943	3924	3893
40°	3960	3899	3899
45°	4004	3887	3873
50°	3954	3866	3841
55°	3944	3818	3836
60°	3945	3728	3758
65°	3846	3613	3626
70°	3677	3496	3163
75°	3421	3100	2599
80°	2982	2684	3009
85°	2377	2853	2908



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	70.2	3.2
10°-20°	201.6	9.1
20°-30°	306.7	13.9
30°-40°	373.7	16.9
40°-50°	395.9	17.9
50°-60°	366.6	16.6
60°-70°	285.2	12.9
70°-80°	158.9	7.2
80°-90°	49.2	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°	578.5	26.2
0°-40°	952.1	43.1
0°-60°	1714.6	77.7
0°-90°	2207.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2207.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	742	742	742	742	742	
5°	739	736	737	739	737	70
15°	713	716	715	715	713	202
25°	668	668	664	662	663	308
35°	600	600	597	594	592	378
45°	526	518	511	507	509	402
55°	420	416	407	404	409	377
65°	302	295	284	287	285	298
75°	164	160	149	134	125	173
85°	38	39	46	47	47	46
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	742.5	742.5	742.5	742.5	742.5
2.5°	740.6	740.6	740.6	740.6	738.7
5°	738.7	735.8	736.8	738.7	736.8
7.5°	732.0	734.8	735.8	735.8	734.8
10°	731.0	728.1	728.1	728.1	727.1
12.5°	721.4	722.3	723.3	723.3	723.3
15°	712.7	715.6	714.6	714.6	712.7
17.5°	708.9	704.1	703.1	703.1	702.1
20°	695.4	693.5	694.4	692.5	692.5
22.5°	681.9	681.0	680.0	679.1	676.2
25°	667.5	667.5	663.7	661.7	662.7
27.5°	650.2	652.1	650.2	648.3	646.3
30°	639.6	634.8	632.9	631.0	629.0
32.5°	621.3	619.4	613.6	610.8	612.7
35°	600.2	600.2	597.3	594.4	592.5
37.5°	586.7	580.9	576.1	573.3	573.3
40°	563.6	563.6	555.0	551.1	555.0
42.5°	541.5	541.5	534.8	532.9	530.0
45°	526.1	517.5	510.7	506.9	508.8
47.5°	497.3	495.3	486.7	483.8	487.6
50°	472.3	471.3	461.7	459.8	458.8
52.5°	452.1	443.4	434.7	431.9	433.8
55°	420.3	416.5	406.9	404.0	408.8
57.5°	393.4	389.5	378.0	376.1	376.1
60°	366.5	357.8	346.3	344.3	349.1
62.5°	331.8	328.0	315.5	316.4	321.3
65°	302.0	295.3	283.7	286.6	284.7
67.5°	270.3	262.6	253.0	249.1	246.2
70°	233.7	228.9	222.2	208.7	201.0
72.5°	197.2	193.3	186.6	167.4	161.6
75°	164.5	159.7	149.1	133.7	125.0
77.5°	128.9	128.9	114.5	107.7	111.6
80°	96.2	97.1	86.6	94.3	97.1
82.5°	65.4	64.4	71.2	74.1	74.1
85°	38.5	39.4	46.2	47.1	47.1
87.5°	15.4	18.3	21.2	22.1	23.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)