

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: P393037

Luminaire Tested: **14EN-LD2-28-UNV-L83050-W2A-1-U (4000K)**

Issue Date: 3/28/2020

Test Information

Test Method: LM-79-08
Report Number: P393037
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-563-51)
Test Lab: INNOVATION CENTER
Issue Date: 3/28/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 14EN-LD2-28-UNV-L83050-W2A-1-U (4000K)
Description: 1X4 ENCOUNTER, 2800 LUMENS, VIVIDTUNE TUNABLE WHITE
Light Source: 2700K/6500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2808.8 lumens
Efficiency: N/A
Efficacy: 97.2 lumens/watt
Spacing Criteria (0/90/45): 1.29 / 1.27 / 1.4
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

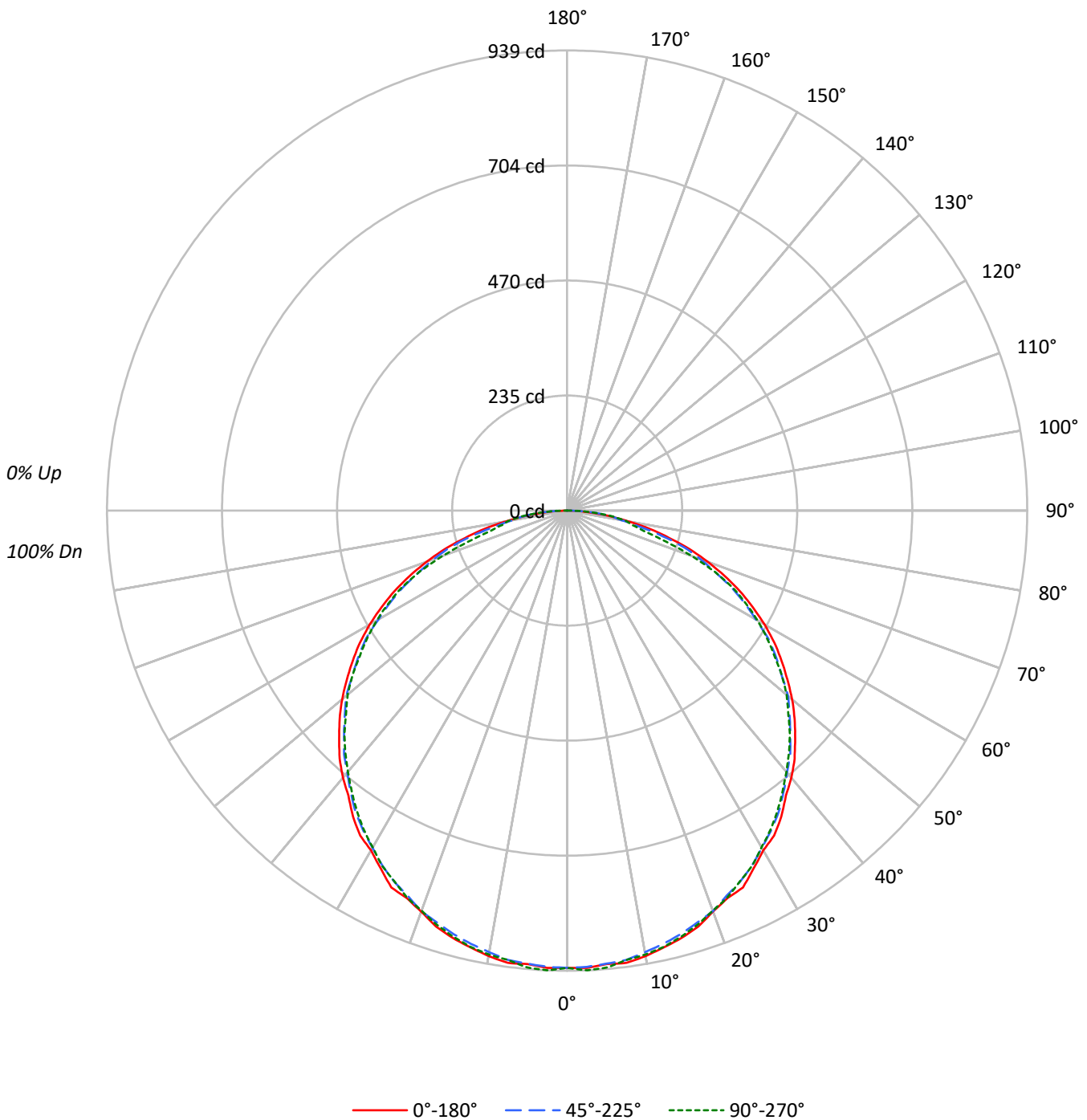
Input Watts (W): 28.9
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	103	99	95	106	101	97	93	97	93	90	93	90	88	89	87	85	83
2	98	90	83	77	96	88	81	76	84	79	74	81	76	72	78	74	71	68
3	89	78	70	63	87	77	69	63	74	67	62	71	65	61	68	64	60	57
4	82	69	60	53	79	68	60	53	65	58	52	63	57	52	61	55	51	49
5	75	62	53	46	73	61	52	46	58	51	45	56	50	44	55	49	44	42
6	69	55	46	40	67	55	46	40	53	45	39	51	44	39	49	43	39	36
7	64	50	41	35	62	49	41	35	48	40	35	46	39	34	45	39	34	32
8	60	46	37	31	58	45	37	31	44	36	31	42	36	31	41	35	30	29
9	56	42	34	28	54	41	33	28	40	33	28	39	32	28	38	32	27	26
10	52	39	31	25	51	38	30	25	37	30	25	36	30	25	35	29	25	23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2511	2511	2511
5°	2509	2506	2528
10°	2522	2500	2514
15°	2515	2493	2507
20°	2493	2491	2488
25°	2520	2481	2478
30°	2487	2468	2465
35°	2504	2471	2458
40°	2501	2452	2445
45°	2503	2450	2446
50°	2510	2464	2447
55°	2507	2441	2422
60°	2503	2394	2416
65°	2474	2347	2379
70°	2394	2275	2125
75°	2245	2099	1692
80°	1960	1728	1883
85°	1488	1893	1893



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	88.5	3.2
10°-20°	253.6	9.0
20°-30°	386.0	13.7
30°-40°	470.8	16.8
40°-50°	499.5	17.8
50°-60°	467.6	16.6
60°-70°	369.5	13.2
70°-80°	209.1	7.4
80°-90°	64.1	2.3
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°	728.1	25.9
0°-40°	1198.9	42.7
0°-60°	2166.1	77.1
0°-90°	2808.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2808.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	933	933	933	933	933	
5°	929	930	928	934	936	89
15°	903	896	895	900	900	255
25°	849	840	836	834	834	388
35°	762	761	752	744	748	476
45°	658	655	644	641	643	508
55°	534	531	520	520	516	478
65°	389	384	369	374	374	383
75°	216	210	202	176	163	229
85°	48	52	61	61	61	59
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	933.0	933.0	933.0	933.0	933.0
2.5°	934.0	935.0	931.9	933.0	939.0
5°	928.9	929.9	927.9	934.0	936.0
7.5°	930.9	925.9	924.9	926.9	924.9
10°	922.9	921.9	914.9	916.9	919.9
12.5°	912.9	910.9	905.8	910.9	911.9
15°	902.8	895.8	894.8	899.8	899.8
17.5°	889.8	889.8	881.7	881.7	885.8
20°	870.7	873.7	869.7	869.7	868.7
22.5°	855.6	853.6	850.6	858.6	854.6
25°	848.6	839.6	835.5	833.5	834.5
27.5°	823.5	825.5	816.5	812.4	817.5
30°	800.4	799.4	794.4	796.4	793.4
32.5°	786.3	777.3	774.3	772.3	772.3
35°	762.2	761.2	752.2	744.2	748.2
37.5°	733.1	733.1	725.1	723.1	722.1
40°	712.0	705.0	698.0	699.0	695.9
42.5°	686.9	681.9	673.9	665.8	669.8
45°	657.8	654.8	643.7	640.7	642.7
47.5°	629.7	622.6	615.6	615.6	611.6
50°	599.5	593.5	588.5	582.5	584.5
52.5°	566.4	565.4	551.3	548.3	552.3
55°	534.3	531.3	520.2	520.2	516.2
57.5°	501.1	496.1	487.1	484.1	483.0
60°	465.0	458.9	444.9	441.9	448.9
62.5°	426.8	420.8	407.7	408.7	411.7
65°	388.6	383.6	368.6	373.6	373.6
67.5°	347.5	339.4	326.4	328.4	325.4
70°	304.3	299.3	289.2	278.2	270.1
72.5°	262.1	256.1	251.1	225.0	211.9
75°	215.9	209.9	201.9	175.7	162.7
77.5°	173.7	168.7	150.6	132.6	135.6
80°	126.5	132.6	111.5	118.5	121.5
82.5°	86.4	87.4	91.4	96.4	94.4
85°	48.2	52.2	61.3	61.3	61.3
87.5°	18.1	26.1	27.1	28.1	28.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)