

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: P393039

Luminaire Tested: **14EN-LD2-28-UNV-L83050-W2A-1-U (5000K)**

Issue Date: 3/28/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P393039  
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 (5000K)  
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: 2849.6 lumens  
Efficiency: N/A  
Efficacy: 99.6 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

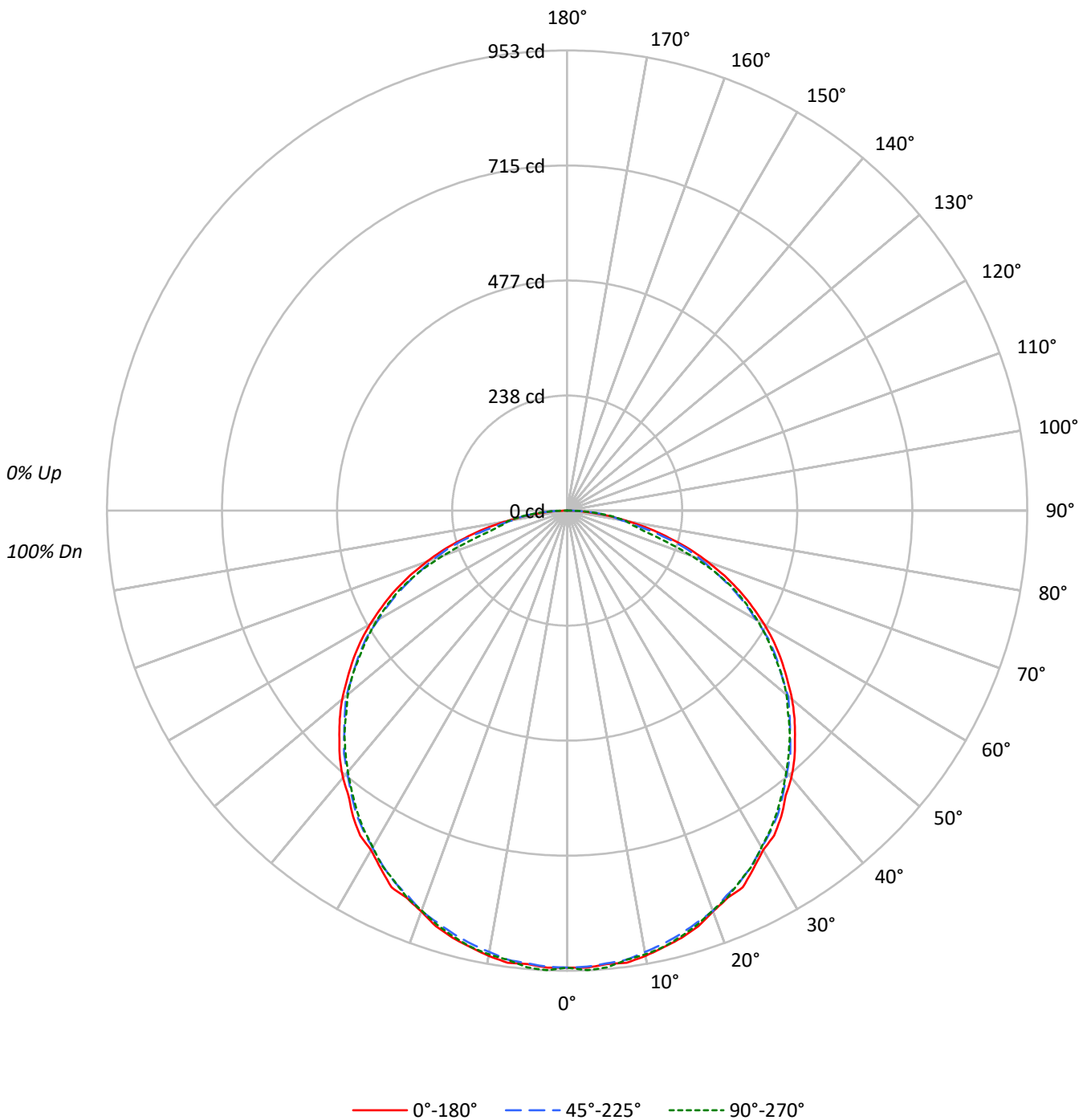
Input Watts (W): 28.6  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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°	2547	2547	2547
5°	2546	2543	2565
10°	2558	2536	2550
15°	2552	2529	2543
20°	2530	2527	2524
25°	2556	2517	2514
30°	2523	2504	2501
35°	2540	2507	2494
40°	2538	2487	2480
45°	2540	2485	2482
50°	2547	2500	2483
55°	2543	2476	2457
60°	2539	2429	2451
65°	2511	2381	2413
70°	2429	2308	2157
75°	2278	2129	1717
80°	1990	1753	1911
85°	1510	1920	1920



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	89.8	3.2
10°-20°	257.2	9.0
20°-30°	391.6	13.7
30°-40°	477.7	16.8
40°-50°	506.8	17.8
50°-60°	474.4	16.6
60°-70°	374.9	13.2
70°-80°	212.1	7.4
80°-90°	65.1	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°	738.7	25.9
0°-40°	1216.3	42.7
0°-60°	2197.6	77.1
0°-90°	2849.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2849.6	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	946	946	946	946	946	
5°	942	944	941	948	950	90
15°	916	909	908	913	913	258
25°	861	852	848	846	847	394
35°	773	772	763	755	759	483
45°	667	664	653	650	652	515
55°	542	539	528	528	524	484
65°	394	389	374	379	379	389
75°	219	213	205	178	165	232
85°	49	53	62	62	62	60
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	946.5	946.5	946.5	946.5	946.5
2.5°	947.5	948.6	945.5	946.5	952.6
5°	942.5	943.5	941.4	947.5	949.6
7.5°	944.5	939.4	938.4	940.4	938.4
10°	936.3	935.3	928.2	930.2	933.3
12.5°	926.1	924.1	919.0	924.1	925.1
15°	916.0	908.8	907.8	912.9	912.9
17.5°	902.7	902.7	894.6	894.6	898.6
20°	883.4	886.4	882.3	882.3	881.3
22.5°	868.1	866.0	863.0	871.1	867.1
25°	860.9	851.8	847.7	845.7	846.7
27.5°	835.5	837.5	828.3	824.3	829.4
30°	812.0	811.0	805.9	808.0	804.9
32.5°	797.8	788.6	785.5	783.5	783.5
35°	773.3	772.3	763.1	755.0	759.1
37.5°	743.8	743.8	735.6	733.6	732.6
40°	722.4	715.2	708.1	709.1	706.1
42.5°	696.9	691.8	683.7	675.5	679.6
45°	667.4	664.3	653.1	650.0	652.1
47.5°	638.8	631.7	624.6	624.6	620.5
50°	608.3	602.1	597.1	590.9	593.0
52.5°	574.6	573.6	559.4	556.3	560.4
55°	542.0	539.0	527.8	527.8	523.7
57.5°	508.4	503.3	494.2	491.1	490.1
60°	471.7	465.6	451.4	448.3	455.4
62.5°	433.0	426.9	413.7	414.7	417.7
65°	394.3	389.2	373.9	379.0	379.0
67.5°	352.5	344.4	331.1	333.2	330.1
70°	308.7	303.6	293.4	282.2	274.1
72.5°	265.9	259.8	254.7	228.2	215.0
75°	219.1	212.9	204.8	178.3	165.1
77.5°	176.3	171.2	152.8	134.5	137.5
80°	128.4	134.5	113.1	120.2	123.3
82.5°	87.6	88.6	92.7	97.8	95.8
85°	48.9	53.0	62.2	62.2	62.2
87.5°	18.3	26.5	27.5	28.5	28.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)