

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: P393054

Luminaire Tested: **14EN-LD2-28-UNV-L93050-W2A-1-U (4500K)**

Issue Date: 3/28/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P393054  
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-L93050-W2A-1-U (4500K)  
Description: 1X4 ENCOUNTER, 2800 LUMENS, VIVIDTUNE TUNABLE WHITE  
Light Source: 2700K/6500K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2455.9 lumens  
Efficiency: N/A  
Efficacy: 86.8 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

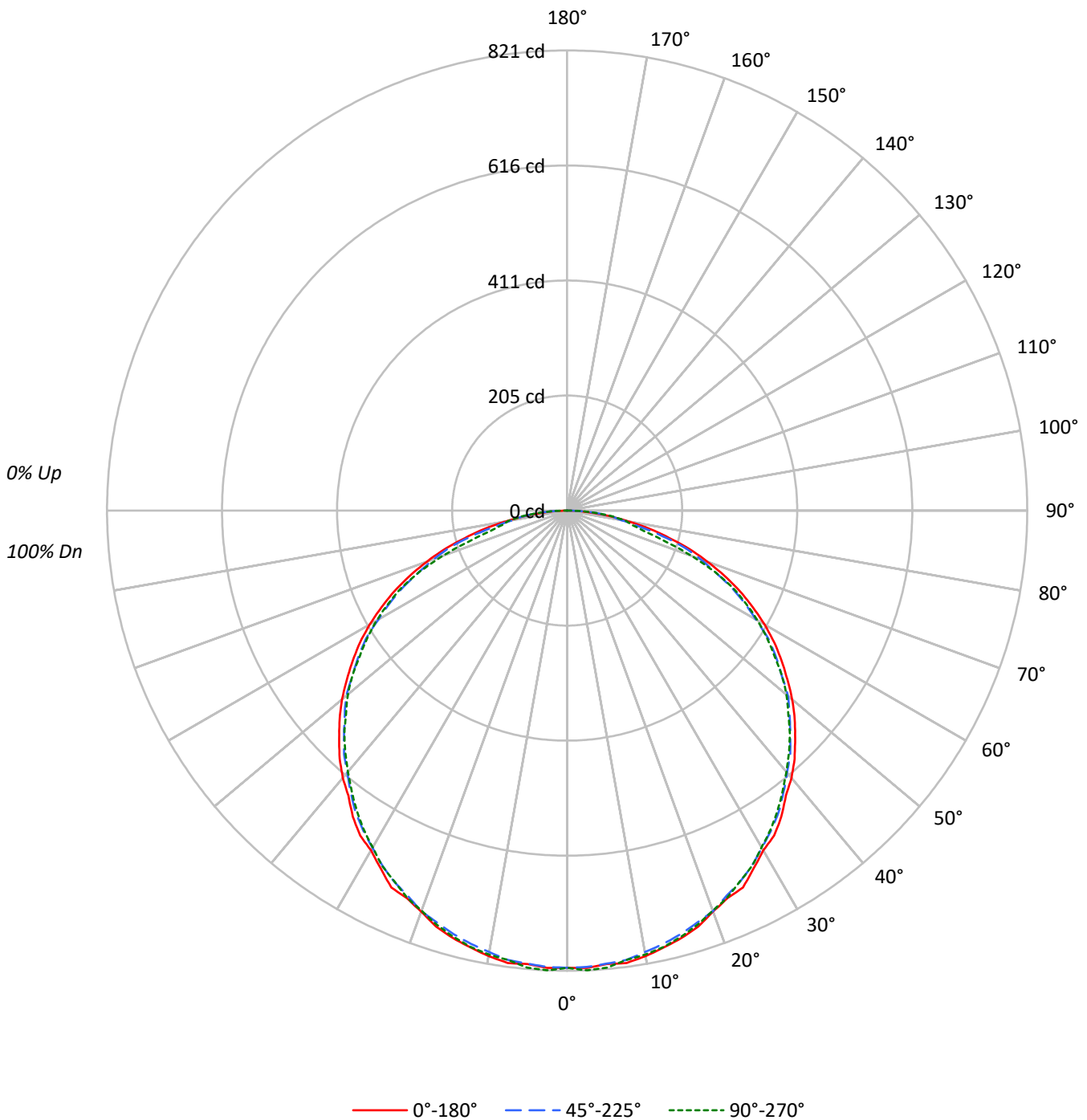
Input Watts (W): 28.3  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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°	2195	2195	2195
5°	2194	2192	2211
10°	2205	2186	2198
15°	2199	2180	2192
20°	2180	2178	2175
25°	2203	2169	2167
30°	2174	2158	2156
35°	2190	2161	2149
40°	2187	2144	2138
45°	2189	2142	2139
50°	2195	2154	2139
55°	2191	2134	2117
60°	2188	2094	2112
65°	2164	2052	2080
70°	2094	1990	1858
75°	1963	1835	1478
80°	1714	1511	1646
85°	1300	1655	1655



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	77.4	3.2
10°-20°	221.7	9.0
20°-30°	337.5	13.7
30°-40°	411.7	16.8
40°-50°	436.8	17.8
50°-60°	408.9	16.6
60°-70°	323.1	13.2
70°-80°	182.8	7.4
80°-90°	56.1	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°	636.6	25.9
0°-40°	1048.3	42.7
0°-60°	1893.9	77.1
0°-90°	2455.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2455.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	816	816	816	816	816	
5°	812	813	811	817	818	78
15°	789	783	782	787	787	223
25°	742	734	731	729	730	339
35°	666	666	658	651	654	416
45°	575	572	563	560	562	444
55°	467	464	455	455	451	418
65°	340	335	322	327	327	335
75°	189	184	176	154	142	200
85°	42	46	54	54	54	51
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	815.7	815.7	815.7	815.7	815.7
2.5°	816.6	817.5	814.9	815.7	821.0
5°	812.2	813.1	811.3	816.6	818.4
7.5°	814.0	809.6	808.7	810.5	808.7
10°	807.0	806.1	799.9	801.7	804.3
12.5°	798.2	796.4	792.0	796.4	797.3
15°	789.4	783.3	782.4	786.8	786.8
17.5°	778.0	778.0	771.0	771.0	774.5
20°	761.3	763.9	760.4	760.4	759.5
22.5°	748.1	746.4	743.7	750.8	747.2
25°	742.0	734.1	730.6	728.8	729.7
27.5°	720.0	721.8	713.9	710.4	714.8
30°	699.8	699.0	694.6	696.3	693.7
32.5°	687.5	679.6	677.0	675.2	675.2
35°	666.5	665.6	657.7	650.7	654.2
37.5°	641.0	641.0	634.0	632.2	631.3
40°	622.6	616.4	610.3	611.1	608.5
42.5°	600.6	596.2	589.2	582.2	585.7
45°	575.1	572.5	562.9	560.2	562.0
47.5°	550.6	544.4	538.3	538.3	534.8
50°	524.2	518.9	514.6	509.3	511.0
52.5°	495.2	494.4	482.1	479.4	482.9
55°	467.1	464.5	454.8	454.8	451.3
57.5°	438.2	433.8	425.9	423.2	422.4
60°	406.6	401.3	389.0	386.4	392.5
62.5°	373.2	367.9	356.5	357.4	360.0
65°	339.8	335.4	322.3	326.6	326.6
67.5°	303.8	296.8	285.4	287.1	284.5
70°	266.1	261.7	252.9	243.2	236.2
72.5°	229.2	223.9	219.5	196.7	185.3
75°	188.8	183.5	176.5	153.7	142.2
77.5°	151.9	147.5	131.7	115.9	118.5
80°	110.6	115.9	97.5	103.6	106.2
82.5°	75.5	76.4	79.9	84.3	82.5
85°	42.1	45.7	53.6	53.6	53.6
87.5°	15.8	22.8	23.7	24.6	24.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)