

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: P393052

Luminaire Tested: **14EN-LD2-28-UNV-L93050-W2A-1-U (3500K)**

Issue Date: 3/28/2020

Test Information

Test Method: LM-79-08
Report Number: P393052
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 (3500K)
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: 2351.9 lumens
Efficiency: N/A
Efficacy: 81.9 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

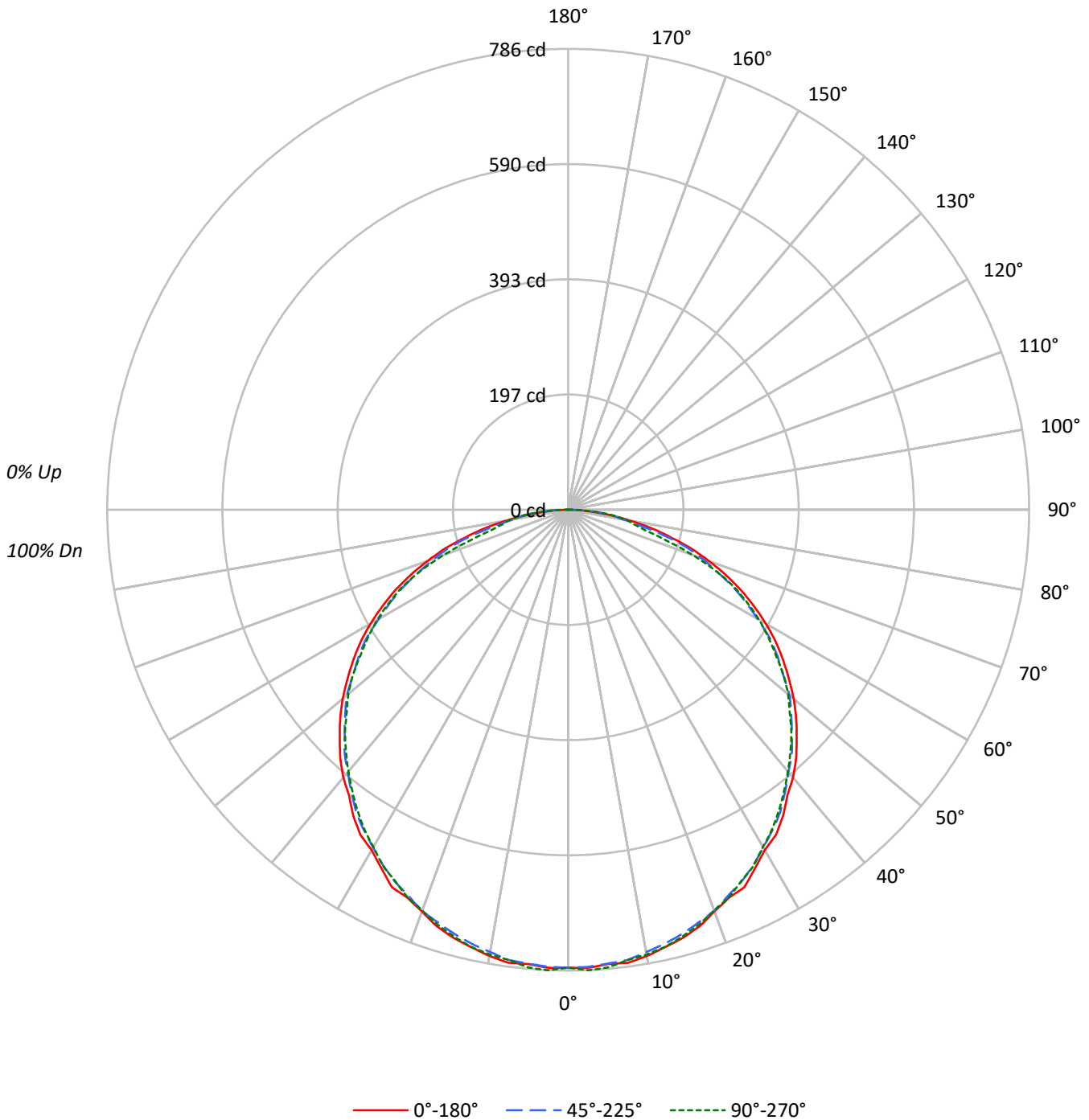
Input Watts (W): 28.7
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2102	2102	2102
5°	2101	2099	2117
10°	2112	2093	2105
15°	2106	2087	2099
20°	2088	2085	2083
25°	2110	2078	2075
30°	2082	2067	2064
35°	2097	2069	2058
40°	2094	2053	2047
45°	2096	2051	2048
50°	2102	2063	2049
55°	2099	2044	2028
60°	2096	2005	2023
65°	2072	1965	1992
70°	2005	1906	1780
75°	1880	1757	1416
80°	1643	1446	1578
85°	1247	1584	1584



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	74.1	3.2
10°-20°	212.3	9.0
20°-30°	323.2	13.7
30°-40°	394.2	16.8
40°-50°	418.3	17.8
50°-60°	391.6	16.6
60°-70°	309.4	13.2
70°-80°	175.1	7.4
80°-90°	53.7	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°	609.7	25.9
0°-40°	1003.9	42.7
0°-60°	1813.8	77.1
0°-90°	2351.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2351.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	781	781	781	781	781	
5°	778	779	777	782	784	74
15°	756	750	749	754	754	213
25°	711	703	700	698	699	325
35°	638	637	630	623	626	399
45°	551	548	539	536	538	425
55°	447	445	436	436	432	400
65°	325	321	309	313	313	321
75°	181	176	169	147	136	191
85°	40	44	51	51	51	49
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	781.2	781.2	781.2	781.2	781.2
2.5°	782.1	782.9	780.4	781.2	786.3
5°	777.9	778.7	777.0	782.1	783.7
7.5°	779.5	775.3	774.5	776.2	774.5
10°	772.8	772.0	766.1	767.8	770.3
12.5°	764.4	762.7	758.5	762.7	763.6
15°	756.0	750.1	749.3	753.5	753.5
17.5°	745.1	745.1	738.3	738.3	741.7
20°	729.1	731.6	728.2	728.2	727.4
22.5°	716.5	714.8	712.3	719.0	715.6
25°	710.6	703.0	699.7	698.0	698.8
27.5°	689.6	691.2	683.7	680.3	684.5
30°	670.2	669.4	665.2	666.9	664.3
32.5°	658.4	650.9	648.4	646.7	646.7
35°	638.3	637.4	629.9	623.1	626.5
37.5°	613.9	613.9	607.2	605.5	604.6
40°	596.2	590.3	584.4	585.3	582.8
42.5°	575.2	571.0	564.3	557.5	560.9
45°	550.8	548.3	539.0	536.5	538.2
47.5°	527.3	521.4	515.5	515.5	512.1
50°	502.0	497.0	492.8	487.7	489.4
52.5°	474.3	473.4	461.7	459.1	462.5
55°	447.4	444.9	435.6	435.6	432.2
57.5°	419.6	415.4	407.9	405.3	404.5
60°	389.4	384.3	372.5	370.0	375.9
62.5°	357.4	352.3	341.4	342.3	344.8
65°	325.4	321.2	308.6	312.8	312.8
67.5°	291.0	284.2	273.3	275.0	272.5
70°	254.8	250.6	242.2	232.9	226.2
72.5°	219.5	214.4	210.2	188.4	177.4
75°	180.8	175.8	169.0	147.2	136.2
77.5°	145.5	141.3	126.1	111.0	113.5
80°	106.0	111.0	93.3	99.2	101.8
82.5°	72.3	73.2	76.5	80.7	79.0
85°	40.4	43.7	51.3	51.3	51.3
87.5°	15.1	21.9	22.7	23.5	23.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)