

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: P393069

Luminaire Tested: **14EN-LD2-33-UNV-L83050-W2A-1-U (4000K)**

Issue Date: 3/28/2020

Test Information

Test Method: LM-79-08
Report Number: P393069
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-563-52)
Test Lab: INNOVATION CENTER
Issue Date: 3/28/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 14EN-LD2-33-UNV-L83050-W2A-1-U (4000K)
Description: 1X4 ENCOUNTER, 3300 LUMENS, VIVIDTUNE TUNABLE WHITE
Light Source: 2700K/6500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3319.0 lumens
Efficiency: N/A
Efficacy: 106.0 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

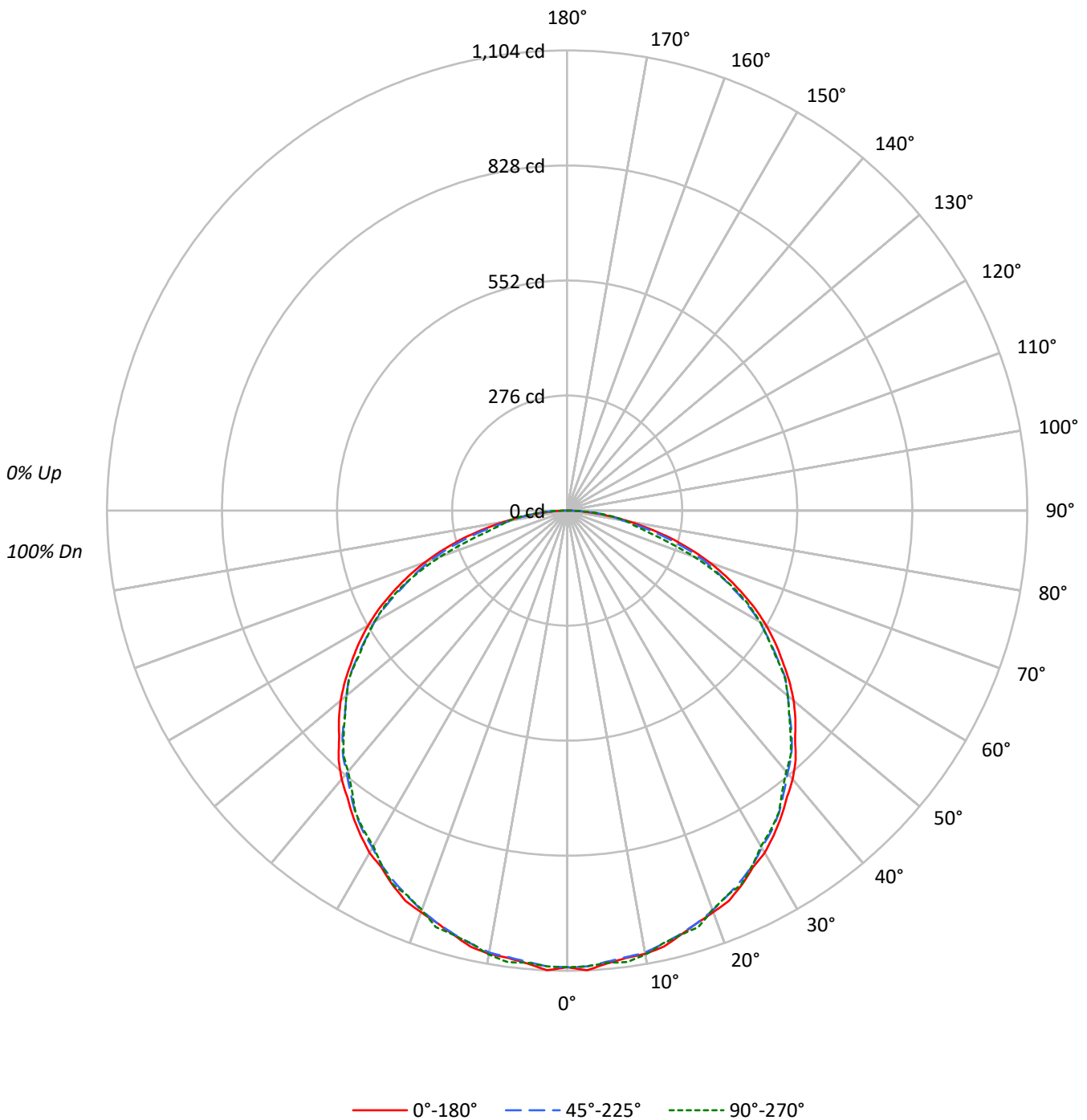
Input Watts (W): 31.3
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	95	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	60	68	64	59	57
4	82	69	60	53	79	68	59	53	65	58	52	63	57	51	61	55	51	48
5	75	62	52	46	73	61	52	45	58	51	45	56	50	44	54	49	44	42
6	69	55	46	40	67	54	46	39	53	45	39	51	44	39	49	43	38	36
7	64	50	41	35	62	49	41	35	48	40	34	46	39	34	45	39	34	32
8	59	46	37	31	58	45	37	31	44	36	31	42	36	31	41	35	30	28
9	56	42	34	28	54	41	33	28	40	33	28	39	32	27	38	32	27	25
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°	2948	2948	2948
5°	2946	2935	2941
10°	2950	2942	2955
15°	2935	2929	2935
20°	2936	2922	2919
25°	2943	2916	2937
30°	2946	2902	2889
35°	2943	2910	2906
40°	2956	2889	2872
45°	2943	2901	2885
50°	2968	2892	2892
55°	2959	2883	2869
60°	2967	2870	2876
65°	2928	2775	2820
70°	2860	2742	2560
75°	2684	2495	2089
80°	2349	2086	2225
85°	1735	2232	2232



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	103.7	3.1
10°-20°	297.7	9.0
20°-30°	454.0	13.7
30°-40°	554.4	16.7
40°-50°	589.9	17.8
50°-60°	553.8	16.7
60°-70°	440.0	13.3
70°-80°	250.2	7.5
80°-90°	75.4	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°	855.4	25.8
0°-40°	1409.8	42.5
0°-60°	2553.4	76.9
0°-90°	3319.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3319.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1096	1096	1096	1096	1096	
5°	1091	1091	1087	1093	1089	104
15°	1054	1058	1052	1056	1054	298
25°	991	989	982	983	989	457
35°	896	891	886	882	885	561
45°	773	772	762	760	758	599
55°	631	627	615	614	612	565
65°	460	453	436	443	443	455
75°	258	251	240	211	201	272
85°	56	61	72	70	72	70
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1095.6	1095.6	1095.6	1095.6	1095.6
2.5°	1103.7	1095.6	1094.6	1095.6	1094.6
5°	1090.6	1090.6	1086.6	1092.6	1088.6
7.5°	1082.6	1086.6	1080.6	1086.6	1092.6
10°	1079.6	1078.6	1076.6	1075.6	1081.6
12.5°	1071.5	1066.5	1064.5	1067.5	1063.5
15°	1053.5	1057.5	1051.5	1055.5	1053.5
17.5°	1037.4	1042.4	1037.4	1039.4	1047.4
20°	1025.3	1026.3	1020.3	1021.3	1019.3
22.5°	1013.3	1005.3	1001.2	1002.2	1000.2
25°	991.2	989.2	982.2	983.2	989.2
27.5°	965.1	967.1	961.1	960.1	961.1
30°	948.0	943.0	934.0	935.0	929.9
32.5°	922.9	916.9	911.9	906.8	908.8
35°	895.8	890.8	885.8	881.7	884.7
37.5°	866.7	863.7	853.6	852.6	847.6
40°	841.6	832.5	822.5	819.5	817.5
42.5°	811.4	806.4	796.4	791.4	794.4
45°	773.3	772.3	762.2	760.2	758.2
47.5°	743.1	736.1	723.1	724.1	722.1
50°	709.0	703.0	690.9	686.9	690.9
52.5°	671.8	668.8	659.8	655.8	658.8
55°	630.7	626.7	614.6	613.6	611.6
57.5°	592.5	586.5	573.4	569.4	571.4
60°	551.3	545.3	533.3	527.2	534.3
62.5°	508.2	500.1	487.1	488.1	492.1
65°	459.9	452.9	435.8	442.9	442.9
67.5°	412.7	405.7	391.7	391.7	385.6
70°	363.5	354.5	348.5	334.4	325.4
72.5°	311.3	302.3	295.3	271.1	258.1
75°	258.1	251.1	240.0	210.9	200.9
77.5°	202.9	200.9	183.8	161.7	164.7
80°	151.6	154.7	134.6	142.6	143.6
82.5°	103.4	103.4	106.5	112.5	112.5
85°	56.2	61.3	72.3	70.3	72.3
87.5°	21.1	30.1	33.1	31.1	31.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)