

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: P393117

Luminaire Tested: **14EN-LD2-38-UNV-L93050-W2A-1-U (4000K)**

Issue Date: 3/28/2020

Test Information

Test Method: LM-79-08
Report Number: P393117
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-563-53)
Test Lab: INNOVATION CENTER
Issue Date: 3/28/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 14EN-LD2-38-UNV-L93050-W2A-1-U (4000K)
Description: 1X4 ENCOUNTER, 3800 LUMENS, VIVIDTUNE TUNABLE WHITE
Light Source: 2700K/6500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3295.9 lumens
Efficiency: N/A
Efficacy: 90.8 lumens/watt
Spacing Criteria (0/90/45): 1.29 / 1.28 / 1.4
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

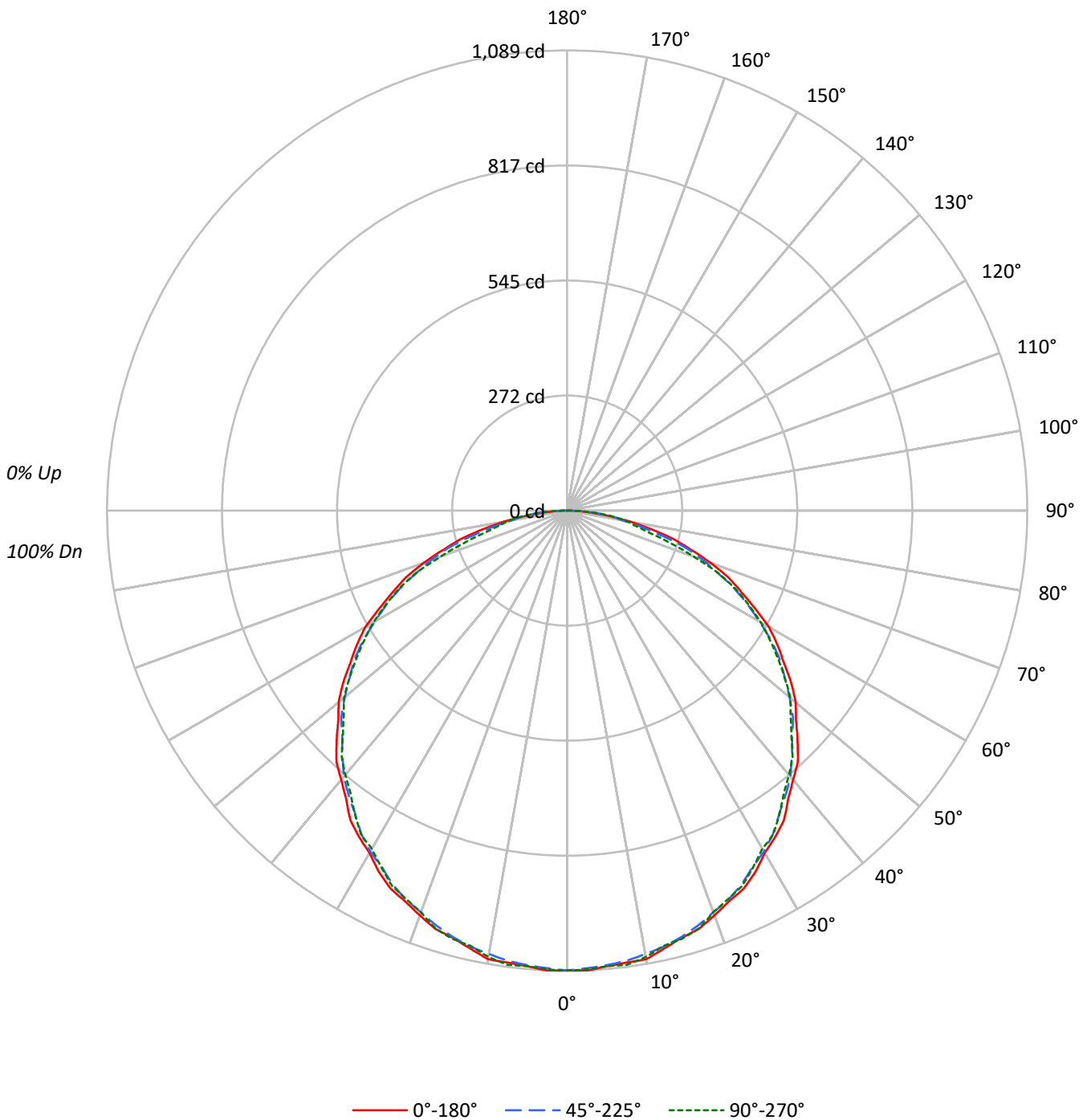
Input Watts (W): 36.3
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P393117

CATALOG NUMBER: 14EN-LD2-38-UNV-L93050-W2A-1-U (4000K)

Luminous Intensity Polar Plot





TEST NUMBER: P393117

CATALOG NUMBER: 14EN-LD2-38-UNV-L93050-W2A-1-U (4000K)

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	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	35	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°	2929	2929	2929
5°	2924	2917	2924
10°	2945	2912	2931
15°	2915	2910	2923
20°	2919	2897	2897
25°	2933	2900	2910
30°	2907	2896	2872
35°	2939	2875	2878
40°	2921	2888	2869
45°	2935	2866	2855
50°	2955	2874	2885
55°	2934	2881	2852
60°	2967	2826	2849
65°	2892	2781	2803
70°	2832	2694	2508
75°	2697	2452	2079
80°	2356	2030	2207
85°	1726	2186	2211



TEST NUMBER: P393117

CATALOG NUMBER: 14EN-LD2-38-UNV-L93050-W2A-1-U (4000K)

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	103.0	3.1
10°-20°	295.6	9.0
20°-30°	450.9	13.7
30°-40°	550.9	16.7
40°-50°	585.9	17.8
50°-60°	550.1	16.7
60°-70°	436.2	13.2
70°-80°	248.5	7.5
80°-90°	74.8	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°	849.6	25.8
0°-40°	1400.5	42.5
0°-60°	2536.4	77.0
0°-90°	3295.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3295.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1088	1088	1088	1088	1088	
5°	1082	1088	1080	1083	1082	103
15°	1046	1048	1045	1046	1049	296
25°	988	978	977	978	980	454
35°	894	884	875	876	876	557
45°	771	767	753	754	750	595
55°	625	622	614	608	608	562
65°	454	452	437	438	440	451
75°	259	250	236	211	200	270
85°	56	62	71	71	72	68
90°	0	0	0	0	0	



TEST NUMBER: P393117

CATALOG NUMBER: 14EN-LD2-38-UNV-L93050-W2A-1-U (4000K)

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1088.4	1088.4	1088.4	1088.4	1088.4
2.5°	1089.3	1088.4	1084.0	1089.3	1086.6
5°	1082.3	1088.4	1079.7	1083.1	1082.3
7.5°	1078.8	1077.0	1074.4	1080.5	1084.0
10°	1077.9	1069.2	1065.7	1071.8	1072.7
12.5°	1061.3	1063.9	1056.9	1058.7	1055.2
15°	1046.5	1048.2	1044.7	1046.5	1049.1
17.5°	1037.7	1032.5	1029.9	1033.4	1036.9
20°	1019.4	1020.3	1011.5	1015.9	1011.5
22.5°	1001.0	1001.9	996.7	996.7	994.9
25°	987.9	978.3	976.6	977.5	980.1
27.5°	964.4	960.9	950.4	953.9	952.1
30°	935.5	939.0	932.0	925.0	924.2
32.5°	916.3	910.2	906.7	904.1	908.4
35°	894.5	884.0	875.3	876.1	876.1
37.5°	859.5	858.7	849.0	844.7	842.1
40°	831.6	828.1	822.0	815.9	816.7
42.5°	808.0	796.6	787.0	785.3	789.7
45°	771.3	766.9	753.0	753.8	750.3
47.5°	734.6	733.7	725.0	718.0	717.1
50°	705.8	697.1	686.6	684.8	689.2
52.5°	668.2	663.9	649.0	649.0	649.0
55°	625.4	621.9	614.1	608.0	608.0
57.5°	589.6	582.6	573.0	568.7	568.7
60°	551.2	540.7	525.0	526.7	529.3
62.5°	500.5	495.3	481.3	479.6	484.8
65°	454.2	451.6	436.8	438.5	440.2
67.5°	413.2	401.8	385.2	391.3	387.8
70°	359.9	353.8	342.4	330.2	318.8
72.5°	306.6	303.1	297.0	267.3	256.8
75°	259.4	249.8	235.8	211.4	200.0
77.5°	203.5	200.9	180.8	161.6	163.3
80°	152.0	153.7	131.0	138.9	142.4
82.5°	99.6	103.1	107.4	112.7	110.1
85°	55.9	62.0	70.8	70.8	71.6
87.5°	20.1	29.7	31.4	31.4	31.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)