

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: P393084

Luminaire Tested: **14EN-LD2-33-UNV-L93050-W2A-1-U (3500K)**

Issue Date: 3/28/2020

Test Information

Test Method: LM-79-08
Report Number: P393084
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-L93050-W2A-1-U (3500K)
Description: 1X4 ENCOUNTER, 3300 LUMENS, VIVIDTUNE TUNABLE WHITE
Light Source: 2700K/6500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2779.2 lumens
Efficiency: N/A
Efficacy: 89.7 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

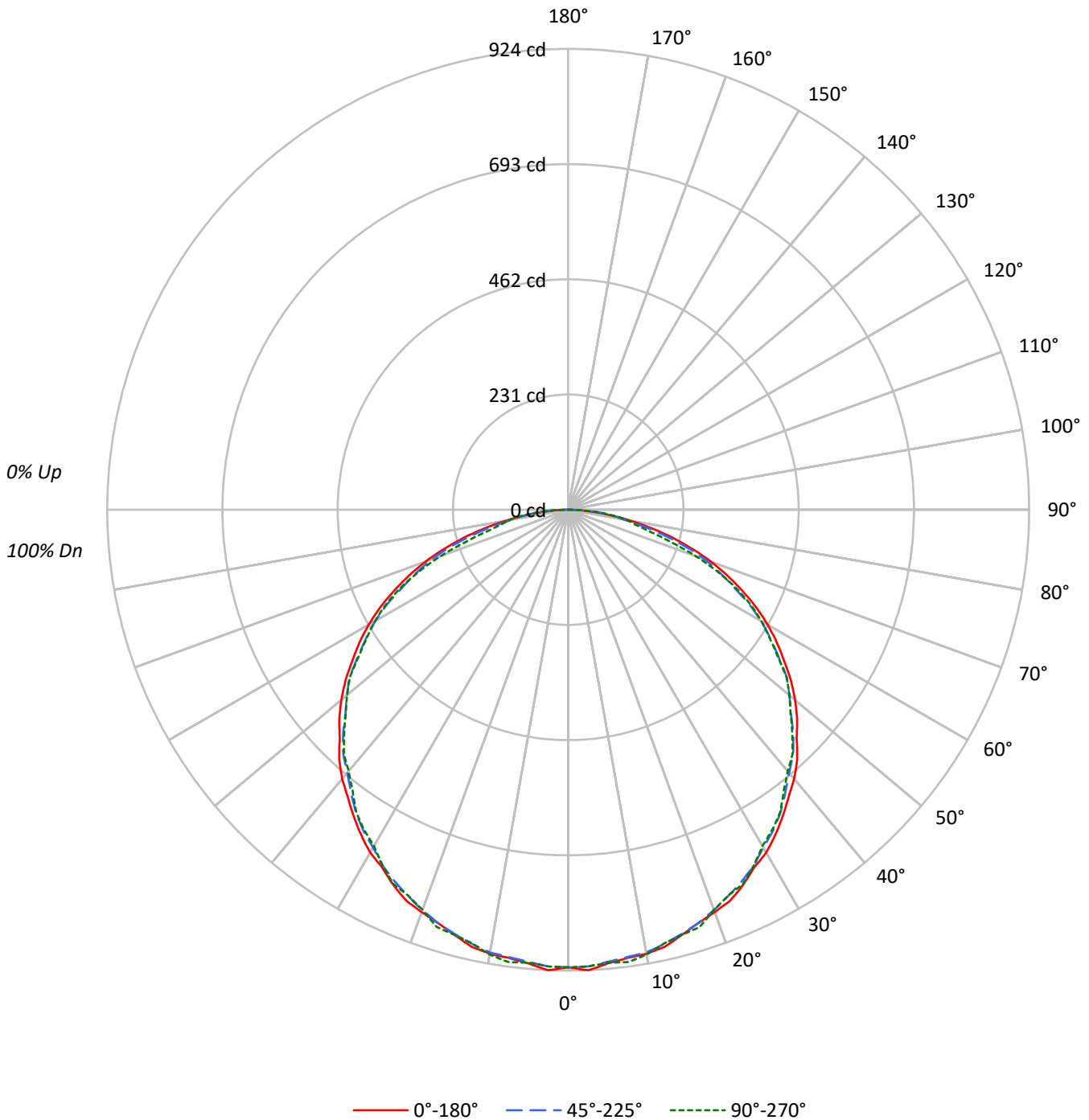
Input Watts (W): 31
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P393084

CATALOG NUMBER: 14EN-LD2-33-UNV-L93050-W2A-1-U (3500K)

Luminous Intensity Polar Plot





TEST NUMBER: P393084

CATALOG NUMBER: 14EN-LD2-33-UNV-L93050-W2A-1-U (3500K)

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°	2469	2469	2469
5°	2467	2458	2462
10°	2470	2463	2475
15°	2457	2453	2457
20°	2459	2447	2444
25°	2464	2442	2459
30°	2467	2430	2420
35°	2464	2437	2434
40°	2475	2419	2405
45°	2464	2429	2416
50°	2485	2422	2422
55°	2478	2414	2403
60°	2485	2403	2408
65°	2452	2324	2361
70°	2395	2296	2144
75°	2247	2090	1749
80°	1968	1746	1864
85°	1454	1868	1868



TEST NUMBER: P393084

CATALOG NUMBER: 14EN-LD2-33-UNV-L93050-W2A-1-U (3500K)

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	86.8	3.1
10°-20°	249.3	9.0
20°-30°	380.1	13.7
30°-40°	464.2	16.7
40°-50°	493.9	17.8
50°-60°	463.7	16.7
60°-70°	368.4	13.3
70°-80°	209.5	7.5
80°-90°	63.1	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°	716.3	25.8
0°-40°	1180.5	42.5
0°-60°	2138.2	76.9
0°-90°	2779.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2779.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	918	918	918	918	918	
5°	913	913	910	915	912	87
15°	882	886	880	884	882	249
25°	830	828	822	823	828	382
35°	750	746	742	738	741	470
45°	648	647	638	637	635	502
55°	528	525	515	514	512	473
65°	385	379	365	371	371	381
75°	216	210	201	177	168	227
85°	47	51	60	59	60	58
90°	0	0	0	0	0	



TEST NUMBER: P393084

CATALOG NUMBER: 14EN-LD2-33-UNV-L93050-W2A-1-U (3500K)

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	917.5	917.5	917.5	917.5	917.5
2.5°	924.2	917.5	916.6	917.5	916.6
5°	913.2	913.2	909.9	914.9	911.6
7.5°	906.5	909.9	904.8	909.9	914.9
10°	904.0	903.2	901.5	900.6	905.7
12.5°	897.3	893.1	891.4	893.9	890.5
15°	882.1	885.5	880.5	883.8	882.1
17.5°	868.7	872.9	868.7	870.4	877.1
20°	858.6	859.4	854.4	855.2	853.5
22.5°	848.5	841.8	838.4	839.2	837.6
25°	830.0	828.3	822.4	823.3	828.3
27.5°	808.1	809.8	804.8	803.9	804.8
30°	793.8	789.6	782.1	782.9	778.7
32.5°	772.8	767.8	763.6	759.4	761.0
35°	750.1	745.9	741.7	738.3	740.9
37.5°	725.7	723.2	714.8	713.9	709.7
40°	704.7	697.1	688.7	686.2	684.5
42.5°	679.5	675.3	666.9	662.7	665.2
45°	647.5	646.7	638.3	636.6	634.9
47.5°	622.3	616.4	605.5	606.3	604.6
50°	593.7	588.7	578.6	575.2	578.6
52.5°	562.6	560.1	552.5	549.1	551.6
55°	528.1	524.7	514.6	513.8	512.1
57.5°	496.1	491.1	480.2	476.8	478.5
60°	461.7	456.6	446.5	441.5	447.4
62.5°	425.5	418.8	407.9	408.7	412.1
65°	385.1	379.3	365.0	370.8	370.8
67.5°	345.6	339.7	328.0	328.0	322.9
70°	304.4	296.8	291.8	280.0	272.5
72.5°	260.7	253.1	247.2	227.1	216.1
75°	216.1	210.2	201.0	176.6	168.2
77.5°	169.9	168.2	153.9	135.4	137.9
80°	127.0	129.5	112.7	119.4	120.3
82.5°	86.6	86.6	89.1	94.2	94.2
85°	47.1	51.3	60.5	58.9	60.5
87.5°	17.7	25.2	27.8	26.1	26.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)