

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: P393100

Luminaire Tested: **14EN-LD2-38-UNV-L83050-W2A-1-U (3500K)**

Issue Date: 3/28/2020

Test Information

Test Method: LM-79-08
Report Number: P393100
Test Lab: INNOVATION CENTER (G3)
Issue Date: 3/28/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 14EN-LD2-38-UNV-L83050-W2A-1-U (3500K)
Description: 1X4 ENCOUNTER, 3800 LUMENS, VIVIDTUNE TUNABLE WHITE
Light Source: 2700K/6500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3773.2 lumens
Efficiency: N/A
Efficacy: 101.7 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

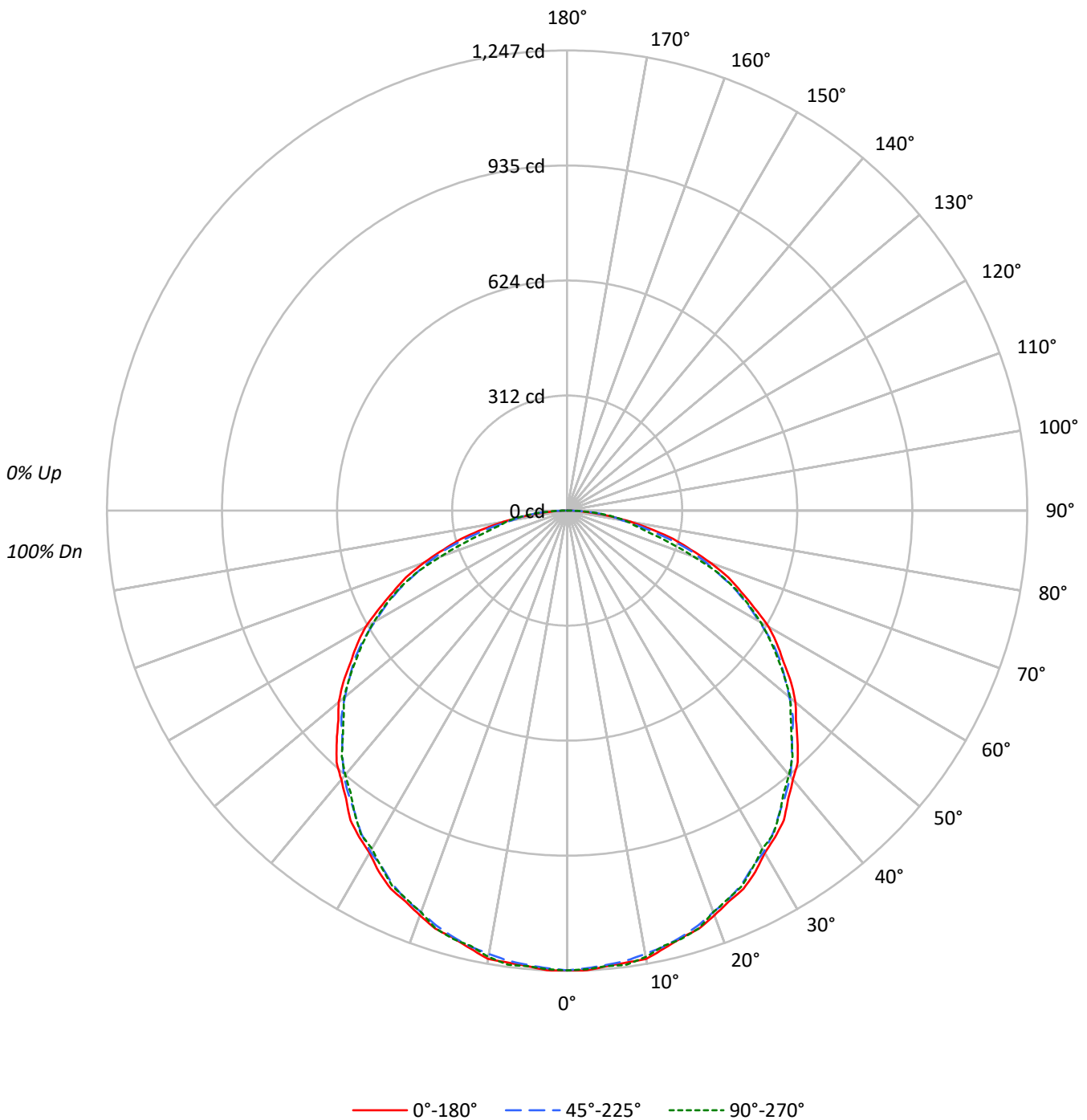
Input Watts (W): 37.1
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P393100

CATALOG NUMBER: 14EN-LD2-38-UNV-L83050-W2A-1-U (3500K)

Luminous Intensity Polar Plot





TEST NUMBER: P393100

CATALOG NUMBER: 14EN-LD2-38-UNV-L83050-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	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°	3353	3353	3353
5°	3347	3339	3347
10°	3372	3334	3355
15°	3338	3332	3346
20°	3342	3316	3316
25°	3358	3320	3331
30°	3328	3315	3287
35°	3364	3292	3295
40°	3344	3306	3284
45°	3360	3280	3269
50°	3383	3291	3303
55°	3359	3298	3265
60°	3396	3235	3261
65°	3311	3184	3209
70°	3242	3084	2872
75°	3088	2807	2381
80°	2696	2325	2526
85°	1976	2501	2532



TEST NUMBER: P393100

CATALOG NUMBER: 14EN-LD2-38-UNV-L83050-W2A-1-U (3500K)

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	117.9	3.1
10°-20°	338.4	9.0
20°-30°	516.2	13.7
30°-40°	630.6	16.7
40°-50°	670.7	17.8
50°-60°	629.7	16.7
60°-70°	499.4	13.2
70°-80°	284.5	7.5
80°-90°	85.6	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°	972.6	25.8
0°-40°	1603.3	42.5
0°-60°	2903.7	77.0
0°-90°	3773.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3773.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1246	1246	1246	1246	1246	
5°	1239	1246	1236	1240	1239	118
15°	1198	1200	1196	1198	1201	339
25°	1131	1120	1118	1119	1122	519
35°	1024	1012	1002	1003	1003	637
45°	883	878	862	863	859	682
55°	716	712	703	696	696	643
65°	520	517	500	502	504	517
75°	297	286	270	242	229	310
85°	64	71	81	81	82	78
90°	0	0	0	0	0	



TEST NUMBER: P393100

CATALOG NUMBER: 14EN-LD2-38-UNV-L83050-W2A-1-U (3500K)

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1246	1246	1246	1246	1246
2.5°	1247	1246	1241	1247	1244
5°	1239	1246	1236	1240	1239
7.5°	1235	1233	1230	1237	1241
10°	1234	1224	1220	1227	1228
12.5°	1215	1218	1210	1212	1208
15°	1198	1200	1196	1198	1201
17.5°	1188	1182	1179	1183	1187
20°	1167	1168	1158	1163	1158
22.5°	1146	1147	1141	1141	1139
25°	1131	1120	1118	1119	1122
27.5°	1104	1100	1088	1092	1090
30°	1071	1075	1067	1059	1058
32.5°	1049	1042	1038	1035	1040
35°	1024	1012	1002	1003	1003
37.5°	984	983	972	967	964
40°	952	948	941	934	935
42.5°	925	912	901	899	904
45°	883	878	862	863	859
47.5°	841	840	830	822	821
50°	808	798	786	784	789
52.5°	765	760	743	743	743
55°	716	712	703	696	696
57.5°	675	667	656	651	651
60°	631	619	601	603	606
62.5°	573	567	551	549	555
65°	520	517	500	502	504
67.5°	473	460	441	448	444
70°	412	405	392	378	365
72.5°	351	347	340	306	294
75°	297	286	270	242	229
77.5°	233	230	207	185	187
80°	174	176	150	159	163
82.5°	114	118	123	129	126
85°	64	71	81	81	82
87.5°	23	34	36	36	36
90°	0	0	0	0	0

(END OF REPORT)