

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: P393358

Luminaire Tested: **22EN-LD2-39-UNV-L83050-W2A-1-U (4500K)**

Issue Date: 3/28/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P393358  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-563-11)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/28/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 22EN-LD2-39-UNV-L83050-W2A-1-U (4500K)  
Description: 2X2 ENCOUNTER, 3900 LUMENS, VIVIDTUNE TUNABLE WHITE  
Light Source: 2700K/6500K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4001.3 lumens  
Efficiency: N/A  
Efficacy: 134.3 lumens/watt  
Spacing Criteria (0/90/45): 1.26 / 1.25 / 1.37  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct

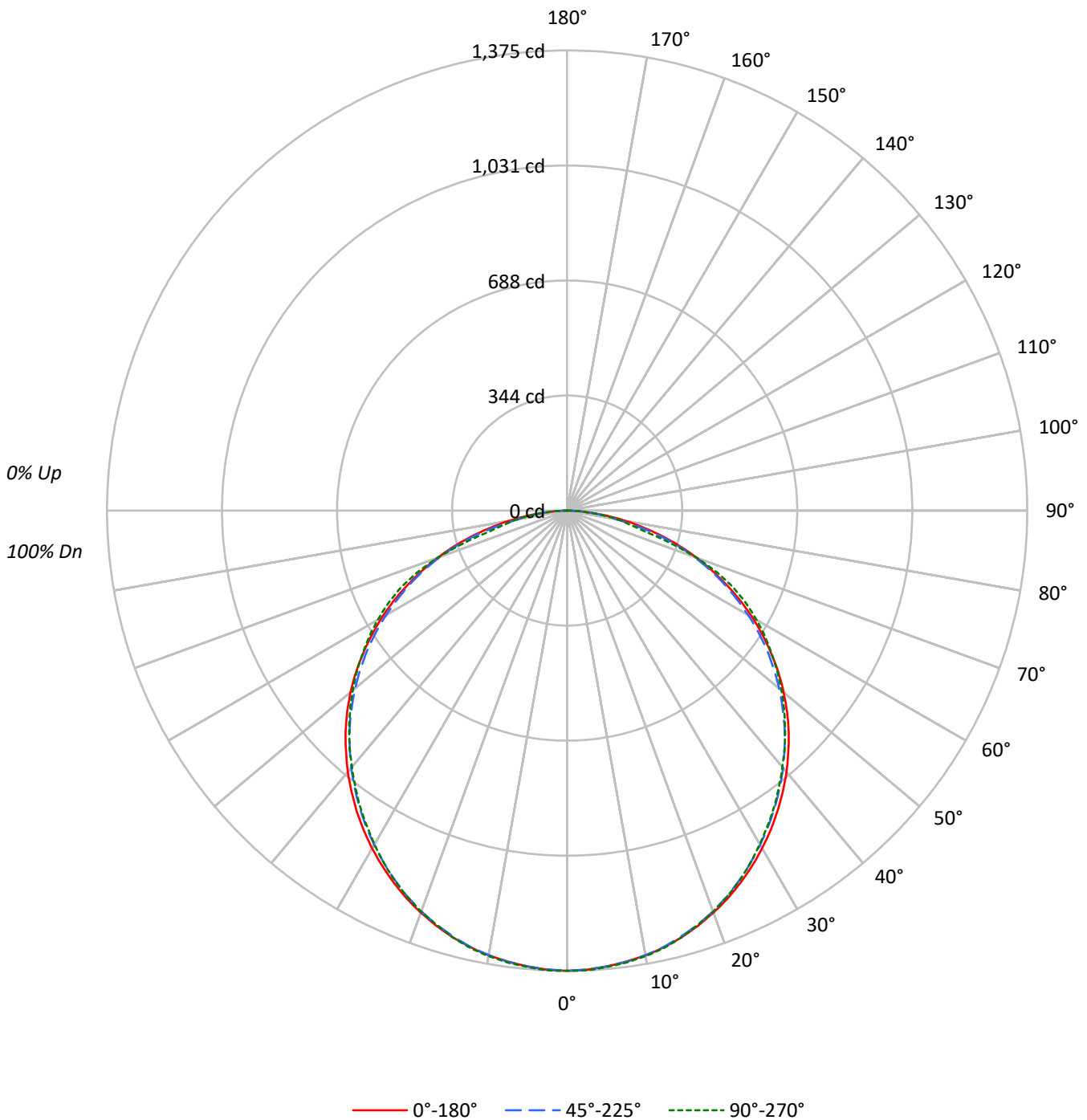
Input Watts (W): 29.8  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P393358

CATALOG NUMBER: 22EN-LD2-39-UNV-L83050-W2A-1-U (4500K)

### Luminous Intensity Polar Plot





TEST NUMBER: P393358

CATALOG NUMBER: 22EN-LD2-39-UNV-L83050-W2A-1-U (4500K)

**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	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					100			
1	109	104	99	95	106	101	97	94	97	94	91	93	91	88	90	87	85	83					83			
2	99	90	83	77	96	88	82	76	85	79	75	81	77	73	78	75	71	69					69			
3	90	79	71	64	87	77	70	63	74	68	62	72	66	61	69	64	60	58					58			
4	82	70	61	54	80	68	60	54	66	59	53	64	57	52	61	56	51	49					49			
5	75	62	53	46	73	61	52	46	59	51	46	57	50	45	55	49	45	42					42			
6	69	56	47	40	68	55	46	40	53	45	40	51	45	39	50	44	39	37					37			
7	64	51	42	36	63	50	41	35	48	41	35	47	40	35	45	39	35	33					33			
8	60	46	38	32	58	45	37	32	44	37	31	43	36	31	42	36	31	29					29			
9	56	42	34	28	54	42	34	28	41	33	28	40	33	28	38	32	28	26					26			
10	52	39	31	26	51	39	31	26	38	30	26	37	30	25	36	30	25	24					24			

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	3700	3700	3700
5°	3692	3692	3698
10°	3688	3685	3694
15°	3678	3669	3678
20°	3661	3649	3652
25°	3642	3617	3621
30°	3621	3583	3577
35°	3601	3554	3544
40°	3583	3525	3515
45°	3564	3498	3505
50°	3537	3464	3503
55°	3495	3424	3500
60°	3440	3363	3517
65°	3351	3293	3506
70°	3227	3172	3235
75°	3037	2910	2477
80°	2729	2303	2445
85°	1948	1979	1979



TEST NUMBER: P393358

CATALOG NUMBER: 22EN-LD2-39-UNV-L83050-W2A-1-U (4500K)

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	129.9	3.2
10°-20°	372.0	9.3
20°-30°	562.2	14.0
30°-40°	678.4	17.0
40°-50°	711.9	17.8
50°-60°	658.8	16.5
60°-70°	520.0	13.0
70°-80°	291.2	7.3
80°-90°	77.1	1.9
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°	1064.1	26.6
0°-40°	1742.4	43.5
0°-60°	3113.1	77.8
0°-90°	4001.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4001.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1375	1375	1375	1375	1375	
5°	1367	1365	1367	1367	1369	130
15°	1320	1319	1317	1317	1320	373
25°	1226	1222	1218	1215	1219	565
35°	1096	1091	1082	1076	1079	686
45°	936	930	919	914	921	722
55°	745	739	730	735	746	665
65°	526	522	517	533	551	520
75°	292	289	280	250	238	309
85°	63	63	64	64	64	81
90°	0	0	0	0	0	



TEST NUMBER: P393358

CATALOG NUMBER: 22EN-LD2-39-UNV-L83050-W2A-1-U (4500K)

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1375.1	1375.1	1375.1	1375.1	1375.1
2.5°	1373.0	1371.0	1372.0	1373.0	1375.1
5°	1366.9	1364.9	1366.9	1366.9	1369.0
7.5°	1358.8	1357.8	1359.8	1359.8	1361.9
10°	1349.6	1347.6	1348.6	1348.6	1351.7
12.5°	1336.4	1335.4	1335.4	1335.4	1338.4
15°	1320.1	1319.1	1317.1	1317.1	1320.1
17.5°	1300.8	1298.7	1297.7	1295.7	1297.7
20°	1278.4	1276.4	1274.3	1272.3	1275.3
22.5°	1254.0	1251.9	1247.9	1244.8	1248.9
25°	1226.5	1222.4	1218.3	1215.3	1219.4
27.5°	1197.0	1191.9	1186.8	1183.7	1186.8
30°	1165.4	1160.3	1153.2	1148.1	1151.2
32.5°	1131.8	1126.7	1118.6	1113.5	1115.5
35°	1096.2	1091.1	1081.9	1075.8	1078.9
37.5°	1058.5	1053.4	1043.3	1037.2	1040.2
40°	1019.9	1013.8	1003.6	997.5	1000.5
42.5°	978.1	973.0	961.8	954.7	961.8
45°	936.4	930.3	919.1	914.0	921.1
47.5°	891.6	884.5	873.3	871.3	879.4
50°	844.8	838.7	827.5	826.5	836.7
52.5°	795.9	788.8	778.6	780.7	791.9
55°	745.0	738.9	729.8	734.9	746.1
57.5°	692.1	687.0	677.9	688.1	701.3
60°	639.2	633.1	624.9	638.2	653.4
62.5°	584.2	577.1	570.0	587.3	604.6
65°	526.2	522.1	517.1	533.3	550.6
67.5°	468.2	465.1	461.1	476.3	486.5
70°	410.2	406.1	403.1	408.1	411.2
72.5°	354.2	347.1	345.0	331.8	325.7
75°	292.1	289.1	279.9	250.4	238.2
77.5°	233.1	229.0	208.7	187.3	188.3
80°	176.1	170.0	148.6	155.7	157.8
82.5°	120.1	115.0	109.9	109.9	107.9
85°	63.1	63.1	64.1	64.1	64.1
87.5°	25.4	27.5	27.5	27.5	27.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)