

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: P393359

Luminaire Tested: **22EN-LD2-39-UNV-L83050-W2A-1-U (5000K)**

Issue Date: 3/28/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P393359  
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 (5000K)  
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: 4005.4 lumens  
Efficiency: N/A  
Efficacy: 134.9 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

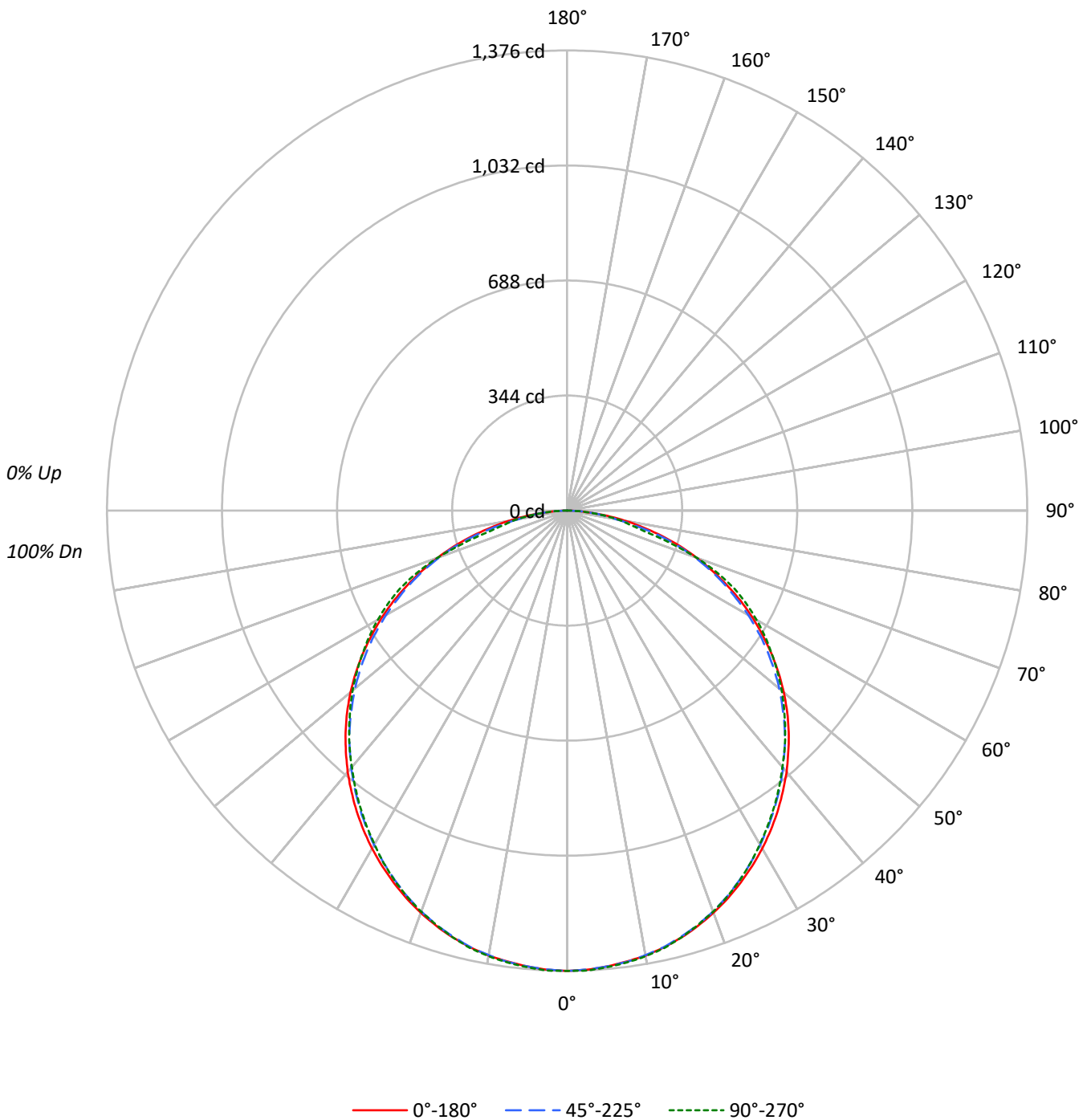
Input Watts (W): 29.7  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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°	3704	3704	3704
5°	3696	3696	3702
10°	3692	3689	3697
15°	3682	3673	3682
20°	3665	3653	3656
25°	3645	3621	3624
30°	3625	3587	3581
35°	3605	3558	3548
40°	3586	3529	3518
45°	3567	3501	3509
50°	3540	3468	3506
55°	3499	3427	3504
60°	3443	3367	3520
65°	3354	3296	3510
70°	3231	3175	3238
75°	3040	2913	2479
80°	2732	2306	2447
85°	1951	1982	1982



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	130.1	3.2
10°-20°	372.3	9.3
20°-30°	562.7	14.0
30°-40°	679.1	17.0
40°-50°	712.6	17.8
50°-60°	659.4	16.5
60°-70°	520.5	13.0
70°-80°	291.5	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°	1065.1	26.6
0°-40°	1744.2	43.5
0°-60°	3116.3	77.8
0°-90°	4005.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4005.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1376	1376	1376	1376	1376	
5°	1368	1366	1368	1368	1370	130
15°	1322	1320	1318	1318	1322	373
25°	1228	1224	1220	1216	1221	566
35°	1097	1092	1083	1077	1080	687
45°	937	931	920	915	922	723
55°	746	740	730	736	747	666
65°	527	523	518	534	551	521
75°	292	289	280	251	238	310
85°	63	63	64	64	64	81
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1376.5	1376.5	1376.5	1376.5	1376.5
2.5°	1374.4	1372.4	1373.4	1374.4	1376.5
5°	1368.3	1366.3	1368.3	1368.3	1370.4
7.5°	1360.2	1359.2	1361.2	1361.2	1363.2
10°	1351.0	1349.0	1350.0	1350.0	1353.1
12.5°	1337.8	1336.8	1336.8	1336.8	1339.8
15°	1321.5	1320.4	1318.4	1318.4	1321.5
17.5°	1302.1	1300.1	1299.1	1297.0	1299.1
20°	1279.7	1277.7	1275.6	1273.6	1276.6
22.5°	1255.2	1253.2	1249.1	1246.1	1250.1
25°	1227.7	1223.7	1219.6	1216.5	1220.6
27.5°	1198.2	1193.1	1188.0	1184.9	1188.0
30°	1166.6	1161.5	1154.4	1149.3	1152.3
32.5°	1133.0	1127.9	1119.7	1114.6	1116.7
35°	1097.3	1092.2	1083.1	1076.9	1080.0
37.5°	1059.6	1054.5	1044.3	1038.2	1041.3
40°	1020.9	1014.8	1004.6	998.5	1001.5
42.5°	979.1	974.0	962.8	955.7	962.8
45°	937.4	931.2	920.0	914.9	922.1
47.5°	892.5	885.4	874.2	872.1	880.3
50°	845.7	839.5	828.3	827.3	837.5
52.5°	796.8	789.6	779.4	781.5	792.7
55°	745.8	739.7	730.5	735.6	746.8
57.5°	692.8	687.7	678.6	688.8	702.0
60°	639.8	633.7	625.6	638.8	654.1
62.5°	584.8	577.7	570.6	587.9	605.2
65°	526.8	522.7	517.6	533.9	551.2
67.5°	468.7	465.6	461.5	476.8	487.0
70°	410.6	406.5	403.5	408.6	411.6
72.5°	354.6	347.4	345.4	332.1	326.0
75°	292.4	289.4	280.2	250.6	238.4
77.5°	233.3	229.2	208.9	187.5	188.5
80°	176.3	170.2	148.8	155.9	157.9
82.5°	120.2	115.1	110.0	110.0	108.0
85°	63.2	63.2	64.2	64.2	64.2
87.5°	25.5	27.5	27.5	27.5	27.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)