

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: P393404

Luminaire Tested: **22EN-LD2-43-UNV-L93050-W2A-1-U (3500K)**

Issue Date: 3/28/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P393404  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-563-12)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/28/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 22EN-LD2-43-UNV-L93050-W2A-1-U (3500K)  
Description: 2X2 ENCOUNTER, 4300 LUMENS, VIVIDTUNE TUNABLE WHITE  
Light Source: 2700K/6500K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3613.4 lumens  
Efficiency: N/A  
Efficacy: 110.5 lumens/watt  
Spacing Criteria (0/90/45): 1.26 / 1.25 / 1.38  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct

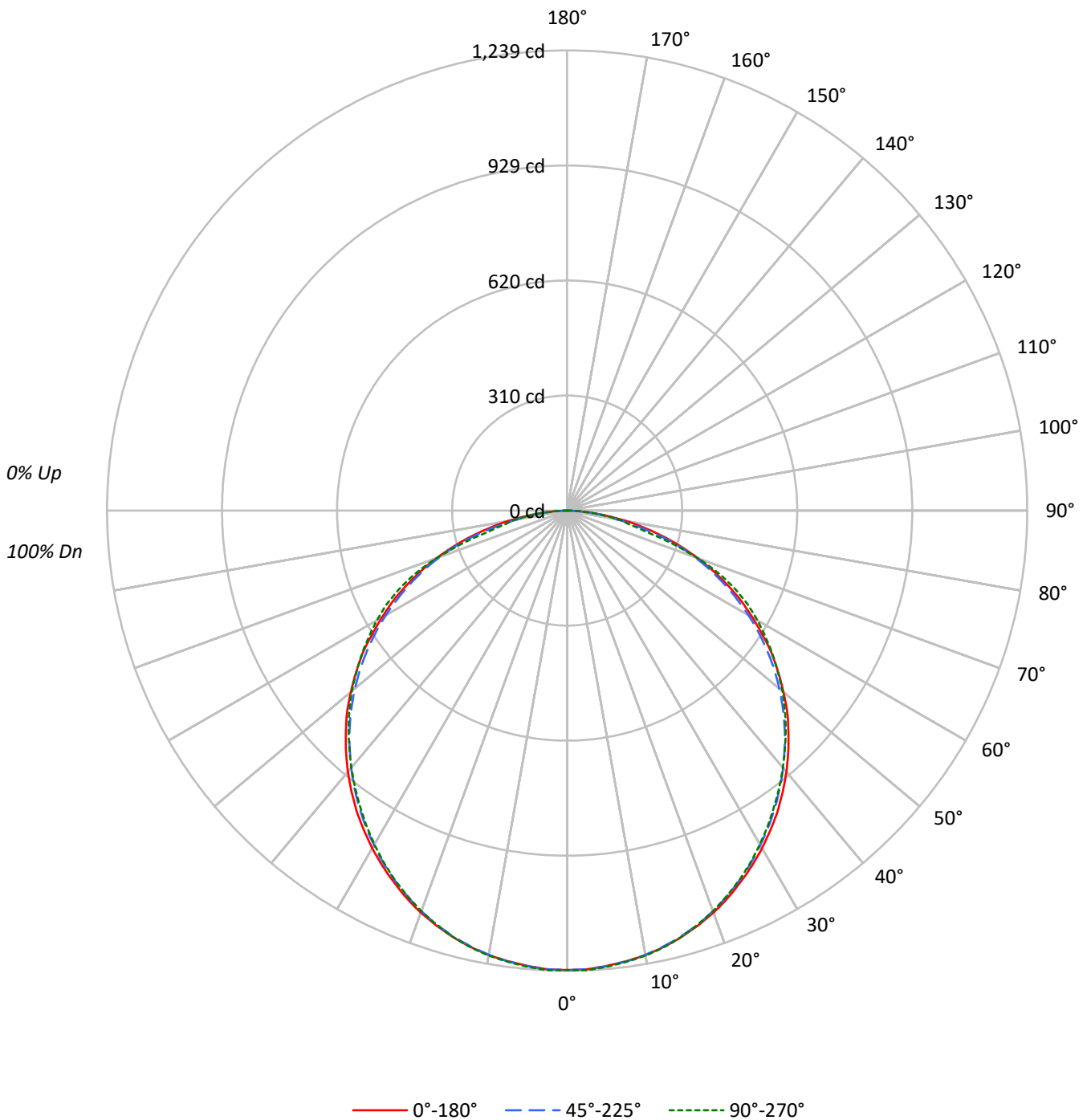
Input Watts (W): 32.7  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P393404

CATALOG NUMBER: 22EN-LD2-43-UNV-L93050-W2A-1-U (3500K)

### Luminous Intensity Polar Plot





TEST NUMBER: P393404

CATALOG NUMBER: 22EN-LD2-43-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	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	90	88	90	87	85	83					83			
2	98	90	83	77	96	88	82	76	85	79	74	81	77	73	78	74	71	69					69			
3	90	79	71	64	87	77	70	63	74	68	62	71	66	61	69	64	60	58					58			
4	82	70	61	54	80	68	60	54	66	59	53	63	57	52	61	56	51	49					49			
5	75	62	53	46	73	61	52	46	59	51	45	57	50	45	55	49	44	42					42			
6	69	56	47	40	67	55	46	40	53	45	40	51	45	39	50	44	39	37					37			
7	64	51	42	35	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	39	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°	3329	3329	3329
5°	3323	3326	3330
10°	3320	3318	3325
15°	3313	3305	3310
20°	3299	3287	3287
25°	3278	3261	3258
30°	3261	3232	3224
35°	3246	3205	3193
40°	3226	3178	3176
45°	3207	3152	3168
50°	3183	3123	3168
55°	3160	3085	3168
60°	3100	3037	3186
65°	3047	2967	3175
70°	2938	2872	2944
75°	2772	2623	2282
80°	2489	2084	2241
85°	1843	1896	1819



TEST NUMBER: P393404

CATALOG NUMBER: 22EN-LD2-43-UNV-L93050-W2A-1-U (3500K)

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	117.0	3.2
10°-20°	334.9	9.3
20°-30°	506.7	14.0
30°-40°	611.8	16.9
40°-50°	642.3	17.8
50°-60°	594.7	16.5
60°-70°	470.6	13.0
70°-80°	264.7	7.3
80°-90°	70.8	2.0
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°	958.6	26.5
0°-40°	1570.4	43.5
0°-60°	2807.4	77.7
0°-90°	3613.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3613.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1237	1237	1237	1237	1237	
5°	1230	1229	1231	1231	1233	117
15°	1189	1187	1186	1186	1188	336
25°	1104	1102	1098	1097	1097	509
35°	988	984	976	970	972	618
45°	843	838	828	826	832	650
55°	674	667	658	664	675	600
65°	478	473	466	484	499	472
75°	267	262	252	230	220	281
85°	60	58	61	58	59	74
90°	0	0	0	0	0	



TEST NUMBER: P393404

CATALOG NUMBER: 22EN-LD2-43-UNV-L93050-W2A-1-U (3500K)

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1237.0	1237.0	1237.0	1237.0	1237.0
2.5°	1236.2	1235.3	1236.2	1236.2	1238.7
5°	1230.3	1229.4	1231.1	1231.1	1232.8
7.5°	1223.6	1222.7	1224.4	1224.4	1225.2
10°	1215.1	1213.5	1214.3	1215.1	1216.8
12.5°	1203.4	1201.7	1201.7	1202.5	1204.2
15°	1189.1	1187.4	1186.5	1186.5	1188.2
17.5°	1171.4	1168.9	1168.9	1167.2	1168.9
20°	1152.1	1149.5	1147.9	1146.2	1147.9
22.5°	1129.4	1126.8	1124.3	1122.6	1123.5
25°	1104.1	1102.5	1098.3	1096.6	1097.4
27.5°	1078.1	1075.5	1070.5	1067.1	1068.8
30°	1049.5	1046.1	1040.2	1036.0	1037.7
32.5°	1019.2	1015.8	1009.1	1004.1	1005.7
35°	988.1	983.9	975.5	970.4	972.1
37.5°	953.6	950.2	941.0	936.0	938.5
40°	918.3	914.9	904.8	900.6	904.0
42.5°	881.3	877.9	867.0	862.8	867.8
45°	842.6	838.4	828.3	825.8	832.5
47.5°	803.9	798.0	787.9	786.3	794.7
50°	760.2	756.0	745.9	746.7	756.8
52.5°	716.5	713.1	703.0	706.4	715.6
55°	673.6	666.9	657.6	663.5	675.3
57.5°	624.0	619.8	611.4	620.6	633.2
60°	576.0	572.7	564.3	576.0	592.0
62.5°	528.9	522.2	514.6	531.5	548.3
65°	478.5	472.6	465.9	483.5	498.7
67.5°	426.4	420.5	415.4	431.4	442.3
70°	373.4	368.3	365.0	370.0	374.2
72.5°	320.4	315.3	312.8	301.1	297.7
75°	266.6	262.4	252.3	230.4	219.5
77.5°	212.8	207.7	190.9	169.9	170.7
80°	160.6	154.7	134.5	140.4	144.6
82.5°	109.3	105.1	100.9	99.2	100.1
85°	59.7	58.0	61.4	58.0	58.9
87.5°	24.4	25.2	26.9	26.1	26.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)