

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: P392909

Luminaire Tested: **12EN-LD2-35-UNV-L83050-W2A-1-U (4000K)**

Issue Date: 3/28/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P392909  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-563-39)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/28/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 12EN-LD2-35-UNV-L83050-W2A-1-U (4000K)  
Description: 1X2 ENCOUNTER, 3500 LUMENS, VIVIDTUNE TUNABLE WHITE  
Light Source: 2700K/6500K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3508.1 lumens  
Efficiency: N/A  
Efficacy: 114.3 lumens/watt  
Spacing Criteria (0/90/45): 1.28 / 1.27 / 1.4  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

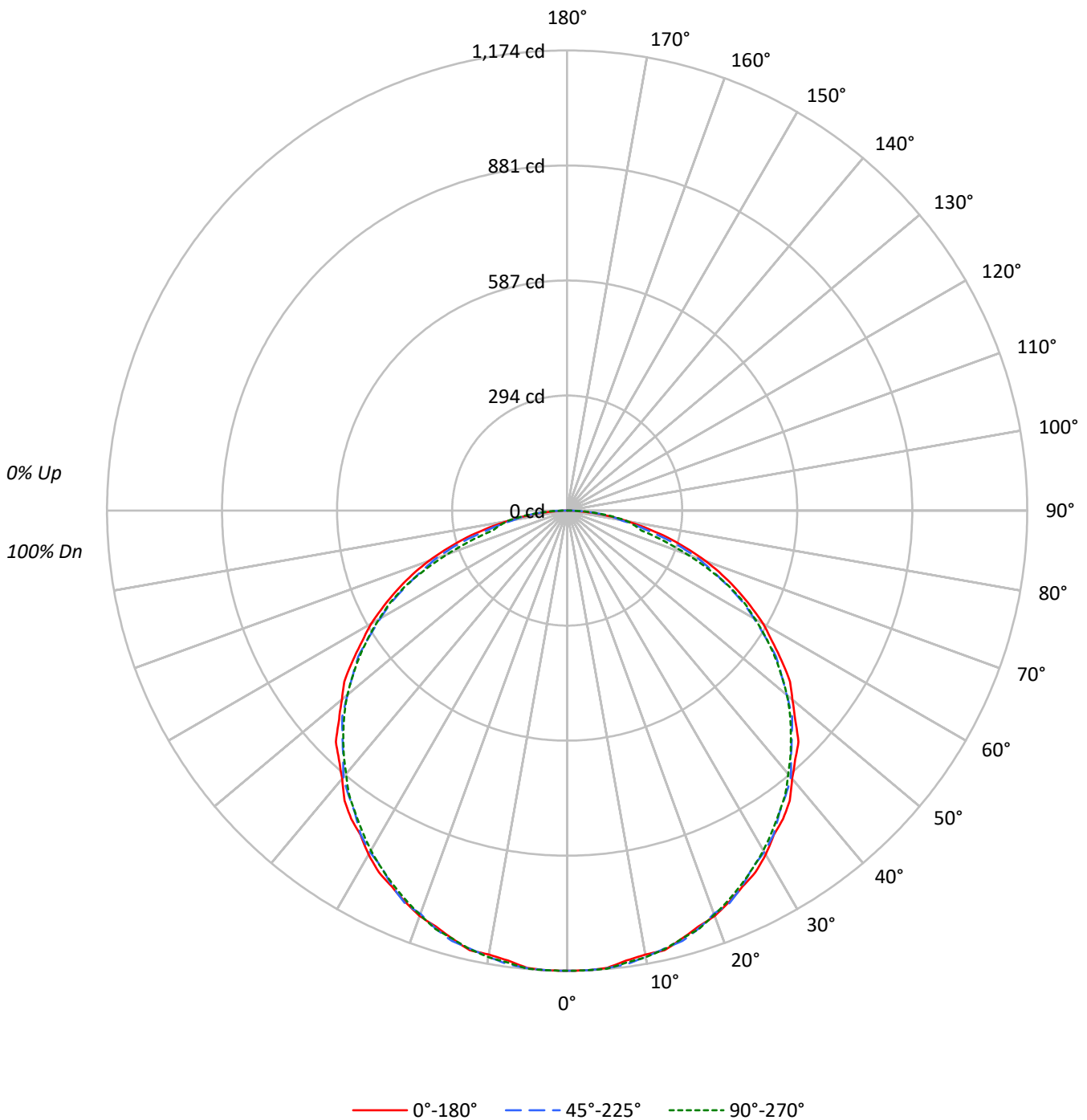
Input Watts (W): 30.7  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P392909

CATALOG NUMBER: 12EN-LD2-35-UNV-L83050-W2A-1-U (4000K)

### Luminous Intensity Polar Plot





TEST NUMBER: P392909

CATALOG NUMBER: 12EN-LD2-35-UNV-L83050-W2A-1-U (4000K)

**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	108	103	99	95	106	101	97	94	97	94	91	93	90	88	89	87	85	83					83			
2	98	90	83	77	96	88	82	76	84	79	74	81	77	73	78	74	71	69					69			
3	89	79	70	64	87	77	69	63	74	67	62	71	66	61	69	64	60	58					58			
4	82	70	61	54	79	68	60	53	66	58	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	44	39	50	44	39	37					37			
7	64	50	42	35	62	50	41	35	48	40	35	47	40	35	45	39	34	32					32			
8	60	46	37	31	58	45	37	31	44	36	31	43	36	31	41	35	31	29					29			
9	56	42	34	28	54	42	34	28	40	33	28	39	33	28	38	32	28	26					26			
10	52	39	31	26	51	38	31	25	37	30	25	36	30	25	35	29	25	23					23			

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

	0°	45°	90°
0°	6318	6318	6318
5°	6326	6332	6337
10°	6284	6317	6322
15°	6301	6334	6301
20°	6304	6269	6286
25°	6286	6274	6250
30°	6297	6254	6222
35°	6308	6196	6189
40°	6272	6237	6166
45°	6352	6168	6145
50°	6281	6121	6130
55°	6266	6107	6059
60°	6215	5923	5966
65°	6087	5729	5793
70°	5910	5578	5120
75°	5492	4949	4092
80°	4795	4265	4826
85°	3847	4588	4650



TEST NUMBER: P392909

CATALOG NUMBER: 12EN-LD2-35-UNV-L83050-W2A-1-U (4000K)

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	111.3	3.2
10°-20°	319.7	9.1
20°-30°	486.8	13.9
30°-40°	593.7	16.9
40°-50°	628.4	17.9
50°-60°	582.1	16.6
60°-70°	453.4	12.9
70°-80°	254.3	7.2
80°-90°	78.4	2.2
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°	917.8	26.2
0°-40°	1511.5	43.1
0°-60°	2722.0	77.6
0°-90°	3508.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3508.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1174	1174	1174	1174	1174	
5°	1171	1172	1172	1174	1173	111
15°	1131	1133	1137	1133	1131	319
25°	1058	1056	1056	1049	1052	489
35°	960	952	943	941	942	600
45°	834	824	810	808	807	639
55°	668	663	651	642	646	597
65°	478	469	450	453	455	473
75°	264	256	238	213	197	278
85°	62	64	74	75	75	73
90°	0	0	0	0	0	



TEST NUMBER: P392909

CATALOG NUMBER: 12EN-LD2-35-UNV-L83050-W2A-1-U (4000K)

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1174.0	1174.0	1174.0	1174.0	1174.0
2.5°	1174.0	1172.0	1174.0	1173.0	1174.0
5°	1171.0	1172.0	1172.0	1174.0	1173.0
7.5°	1157.9	1162.9	1166.9	1165.9	1162.9
10°	1149.9	1154.9	1155.9	1153.9	1156.9
12.5°	1148.9	1149.9	1144.8	1147.9	1145.9
15°	1130.8	1132.8	1136.8	1132.8	1130.8
17.5°	1112.7	1116.7	1117.7	1114.7	1118.7
20°	1100.7	1103.7	1094.6	1098.7	1097.6
22.5°	1080.6	1081.6	1083.6	1076.6	1075.6
25°	1058.5	1056.5	1056.5	1049.4	1052.5
27.5°	1040.4	1033.4	1025.3	1029.4	1027.3
30°	1013.3	1012.3	1006.3	1002.2	1001.2
32.5°	981.2	982.2	980.1	971.1	972.1
35°	960.1	952.0	943.0	941.0	942.0
37.5°	932.9	925.9	915.9	912.9	913.9
40°	892.8	891.8	887.8	875.7	877.7
42.5°	861.6	855.6	845.6	840.6	843.6
45°	834.5	824.5	810.4	808.4	807.4
47.5°	789.3	787.3	778.3	767.2	771.3
50°	750.2	746.2	731.1	725.1	732.1
52.5°	717.0	707.0	688.9	687.9	688.9
55°	667.8	662.8	650.8	641.7	645.7
57.5°	619.6	615.6	598.5	595.5	600.5
60°	577.4	570.4	550.3	549.3	554.3
62.5°	527.2	522.2	504.1	504.1	509.2
65°	478.0	469.0	449.9	452.9	454.9
67.5°	427.8	416.8	399.7	396.7	390.7
70°	375.6	364.5	354.5	335.4	325.4
72.5°	318.3	310.3	299.3	270.1	260.1
75°	264.1	256.1	238.0	212.9	196.8
77.5°	206.9	203.9	182.8	172.7	176.7
80°	154.7	153.7	137.6	150.6	155.7
82.5°	105.4	101.4	111.5	117.5	117.5
85°	62.3	64.3	74.3	75.3	75.3
87.5°	25.1	29.1	34.1	36.2	36.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)