

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: P392940

Luminaire Tested: **12EN-LD2-39-UNV-L83050-W2A-1-U (3500K)**

Issue Date: 3/28/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P392940  
Test Lab: INNOVATION CENTER (G2)  
Issue Date: 3/28/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 12EN-LD2-39-UNV-L83050-W2A-1-U (3500K)  
Description: 1X2 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: 3949.8 lumens  
Efficiency: N/A  
Efficacy: 110.3 lumens/watt  
Spacing Criteria (0/90/45): 1.27 / 1.27 / 1.39  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

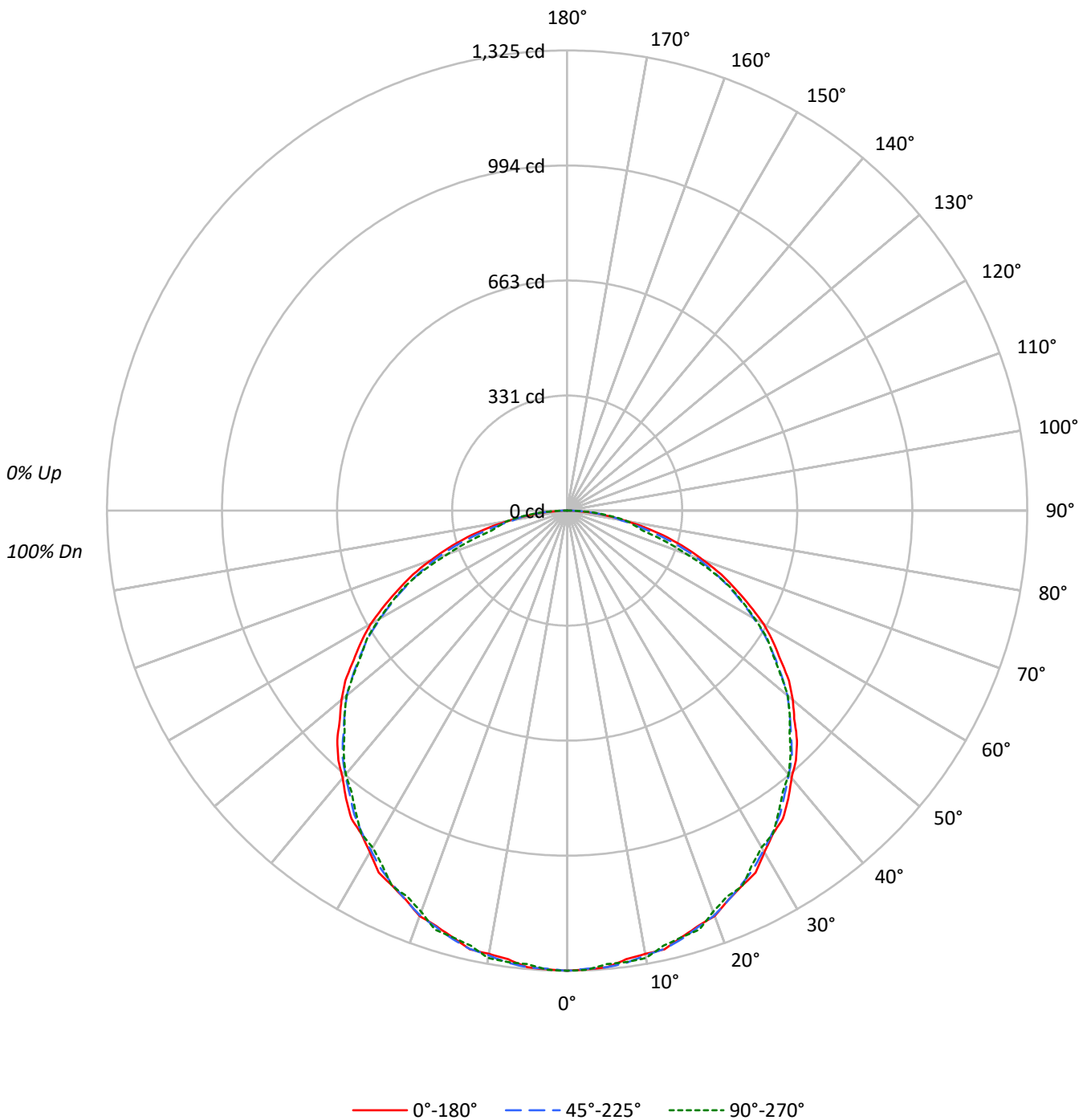
Input Watts (W): 35.8  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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	39	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°	7131	7131	7131
5°	7131	7131	7083
10°	7083	7104	7148
15°	7087	7115	7087
20°	7113	7102	7039
25°	7078	7055	7084
30°	7060	7022	6960
35°	7115	7017	6971
40°	7061	6976	6969
45°	7124	6934	6896
50°	7100	6933	6941
55°	7037	6822	6784
60°	7029	6684	6727
65°	6813	6482	6558
70°	6562	6263	5759
75°	6197	5614	4720
80°	5362	4835	5486
85°	4261	5002	5311



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	125.3	3.2
10°-20°	360.0	9.1
20°-30°	547.9	13.9
30°-40°	667.8	16.9
40°-50°	707.7	17.9
50°-60°	656.1	16.6
60°-70°	510.3	12.9
70°-80°	286.6	7.3
80°-90°	88.0	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°	1033.2	26.2
0°-40°	1701.0	43.1
0°-60°	3064.8	77.6
0°-90°	3949.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3949.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1325	1325	1325	1325	1325	
5°	1320	1315	1320	1317	1311	125
15°	1272	1273	1277	1277	1272	360
25°	1192	1192	1188	1184	1193	551
35°	1083	1076	1068	1061	1061	674
45°	936	926	911	908	906	719
55°	750	746	727	723	723	673
65°	535	530	509	508	515	530
75°	298	288	270	242	227	312
85°	69	71	81	83	86	82
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1325	1325	1325	1325	1325
2.5°	1322	1325	1320	1322	1323
5°	1320	1315	1320	1317	1311
7.5°	1303	1308	1313	1314	1311
10°	1296	1306	1300	1303	1308
12.5°	1294	1290	1293	1288	1283
15°	1272	1273	1277	1277	1272
17.5°	1254	1262	1257	1256	1265
20°	1242	1240	1240	1236	1229
22.5°	1213	1214	1214	1212	1203
25°	1192	1192	1188	1184	1193
27.5°	1175	1166	1162	1157	1152
30°	1136	1134	1130	1127	1120
32.5°	1103	1104	1100	1094	1103
35°	1083	1076	1068	1061	1061
37.5°	1046	1039	1029	1023	1020
40°	1005	1002	993	987	992
42.5°	975	969	958	949	952
45°	936	926	911	908	906
47.5°	887	884	869	865	869
50°	848	843	828	820	829
52.5°	805	794	777	775	774
55°	750	746	727	723	723
57.5°	703	697	678	671	682
60°	653	642	621	619	625
62.5°	593	586	565	565	569
65°	535	530	509	508	515
67.5°	480	470	454	447	443
70°	417	410	398	375	366
72.5°	357	350	337	301	298
75°	298	288	270	242	227
77.5°	234	231	206	193	199
80°	173	174	156	169	177
82.5°	118	114	127	132	135
85°	69	71	81	83	86
87.5°	28	33	38	39	43
90°	0	0	0	0	0

(END OF REPORT)