

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: P183152

Luminaire Tested: **12EN-LD2-31-UNV-L850-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P183152
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P34480)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 12EN-LD2-31-UNV-L850-CD1-U
Description: METALUX ENCOUNTER 1X2 TROFFER

Light Source: EATON LED 5000K
Ballast/Driver: OSRAM ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3528.7 lumens
Efficiency: N/A
Efficacy: 127.4 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.26 / 1.38
Luminous Opening: Rectangular (W 0.92' x L: 1.92' x H: 0')
CIE Type: Direct

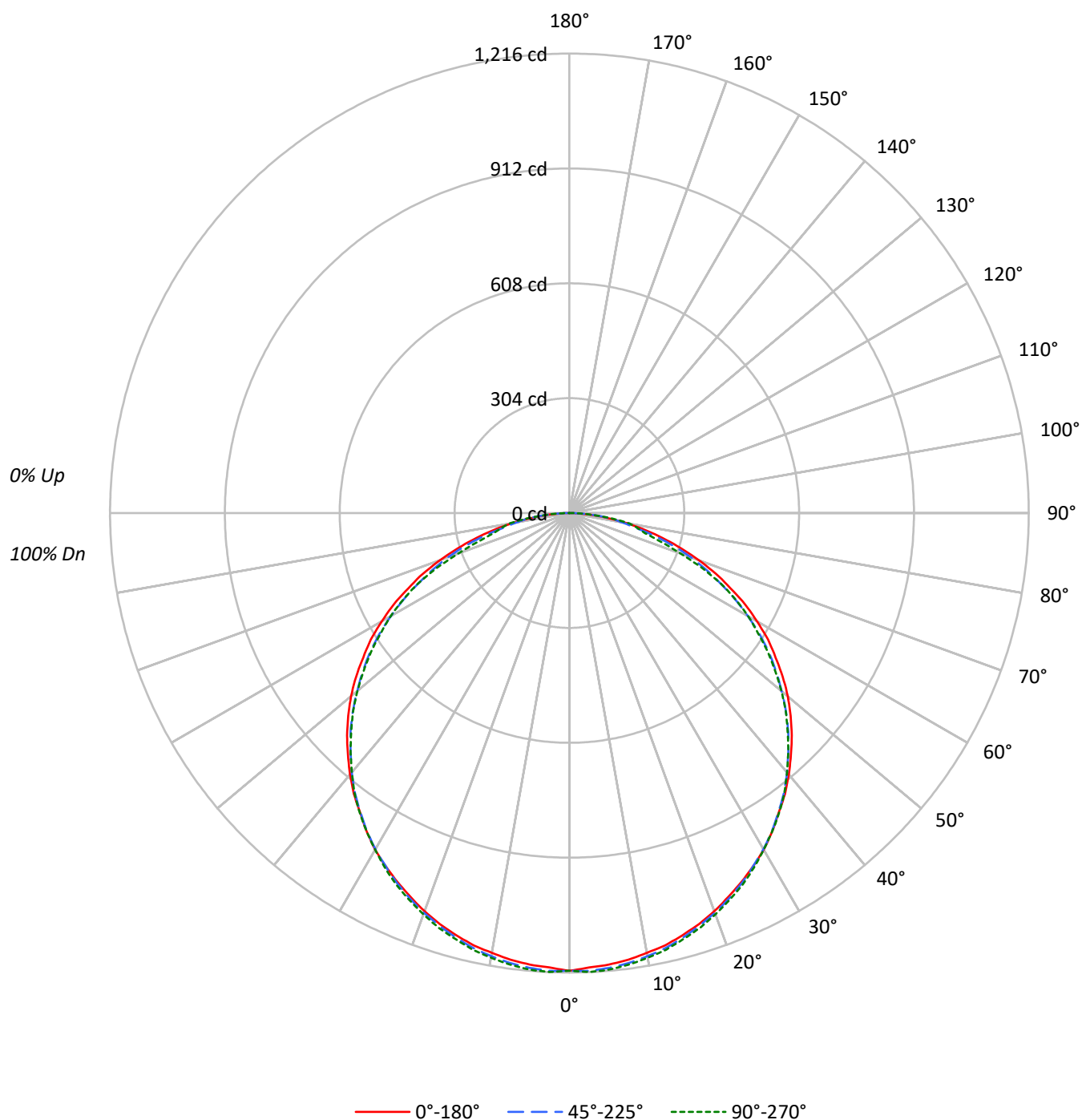
Input Watts (W): 27.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P183152

CATALOG NUMBER: 12EN-LD2-31-UNV-L850-CD1-U

Luminous Intensity Polar Plot





TEST NUMBER: P183152

CATALOG NUMBER: 12EN-LD2-31-UNV-L850-CD1-U

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20
RC	80				70				50				30				0
RW	70	50	30	10	70	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		100
1	109	104	99	95	106	101	97	94	97	94	91		93	90	88		83
2	99	90	83	77	96	88	82	76	85	79	75		81	77	73		69
3	90	79	71	64	87	77	70	63	74	68	62		72	66	61		58
4	82	70	61	54	80	69	60	54	66	59	53		64	57	52		49
5	75	62	53	46	73	61	53	46	59	52	46		57	50	45		43
6	70	56	47	40	68	55	47	40	53	46	40		52	45	40		37
7	64	51	42	36	63	50	42	36	48	41	35		47	40	35		33
8	60	46	38	32	58	46	37	32	44	37	31		43	36	31		29
9	56	42	34	29	55	42	34	28	41	33	28		40	33	28		26
10	52	39	31	26	51	39	31	26	38	31	26		37	30	26		24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7420	7420	7420
5°	7377	7431	7458
10°	7352	7407	7434
15°	7337	7374	7402
20°	7311	7340	7369
25°	7282	7301	7331
30°	7276	7266	7276
35°	7229	7219	7240
40°	7224	7165	7165
45°	7213	7099	7073
50°	7191	6994	6980
55°	7114	6894	6847
60°	7023	6680	6699
65°	6815	6387	6409
70°	6520	6124	5596
75°	6034	5511	4919
80°	5405	4886	5719
85°	4351	4871	4871



TEST NUMBER: P183152

CATALOG NUMBER: 12EN-LD2-31-UNV-L850-CD1-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	114.7	3.2
10°-20°	328.0	9.3
20°-30°	497.9	14.1
30°-40°	604.6	17.1
40°-50°	633.8	18.0
50°-60°	579.8	16.4
60°-70°	443.9	12.6
70°-80°	249.2	7.1
80°-90°	76.8	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°	940.6	26.7
0°-40°	1545.3	43.8
0°-60°	2758.8	78.2
0°-90°	3528.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3528.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1211	1211	1211	1211	1211	
5°	1200	1202	1208	1211	1213	114
15°	1157	1158	1163	1166	1167	327
25°	1077	1077	1080	1082	1084	497
35°	967	967	965	965	968	606
45°	832	828	819	816	816	642
55°	666	662	645	638	641	596
65°	470	460	441	444	442	466
75°	255	246	233	211	208	271
85°	62	63	69	69	69	73
90°	0	0	0	0	0	



TEST NUMBER: P183152

CATALOG NUMBER: 12EN-LD2-31-UNV-L850-CD1-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1211.2	1211.2	1211.2	1211.2	1211.2
2.5°	1203.9	1206.8	1212.7	1215.7	1215.7
5°	1199.5	1202.4	1208.3	1211.2	1212.7
7.5°	1192.1	1195.0	1200.9	1205.4	1205.4
10°	1181.8	1184.7	1190.6	1195.0	1195.0
12.5°	1171.5	1172.9	1178.8	1181.8	1183.3
15°	1156.7	1158.2	1162.6	1165.6	1167.0
17.5°	1140.5	1140.5	1144.9	1147.9	1150.8
20°	1121.4	1122.8	1125.8	1128.7	1130.2
22.5°	1099.3	1100.7	1103.7	1106.6	1108.1
25°	1077.2	1077.2	1080.1	1081.6	1084.5
27.5°	1053.6	1053.6	1053.6	1055.1	1058.0
30°	1028.5	1027.1	1027.1	1025.6	1028.5
32.5°	999.1	999.1	997.6	996.1	999.1
35°	966.6	966.6	965.2	965.2	968.1
37.5°	937.2	935.7	932.7	929.8	934.2
40°	903.3	901.8	895.9	893.0	895.9
42.5°	867.9	865.0	857.6	854.7	857.6
45°	832.5	828.1	819.3	816.3	816.3
47.5°	794.2	789.8	778.0	773.6	776.6
50°	754.5	748.6	733.8	730.9	732.3
52.5°	711.7	704.4	689.6	686.7	686.7
55°	666.0	661.6	645.4	638.0	641.0
57.5°	623.3	614.5	596.8	587.9	592.4
60°	573.2	562.9	545.2	540.8	546.7
62.5°	524.6	512.8	495.1	492.2	496.6
65°	470.1	459.7	440.6	443.5	442.1
67.5°	420.0	408.2	392.0	384.6	380.2
70°	364.0	353.6	341.9	321.2	312.4
72.5°	309.4	300.6	288.8	260.8	254.9
75°	254.9	246.1	232.8	210.7	207.8
77.5°	203.3	197.5	178.3	178.3	185.7
80°	153.2	150.3	138.5	154.7	162.1
82.5°	103.1	100.2	112.0	117.9	116.4
85°	61.9	63.4	69.3	69.3	69.3
87.5°	26.5	29.5	30.9	30.9	32.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)