

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: P183154

Luminaire Tested: **12EN-LD2-35-UNV-L830-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P183154
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-LD2-35-UNV-L830-CD1-U
Description: METALUX ENCOUNTER 1X2 TROFFER

Light Source: EATON LED 3000K
Ballast/Driver: OSRAM ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3453.2 lumens
Efficiency: N/A
Efficacy: 110.0 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

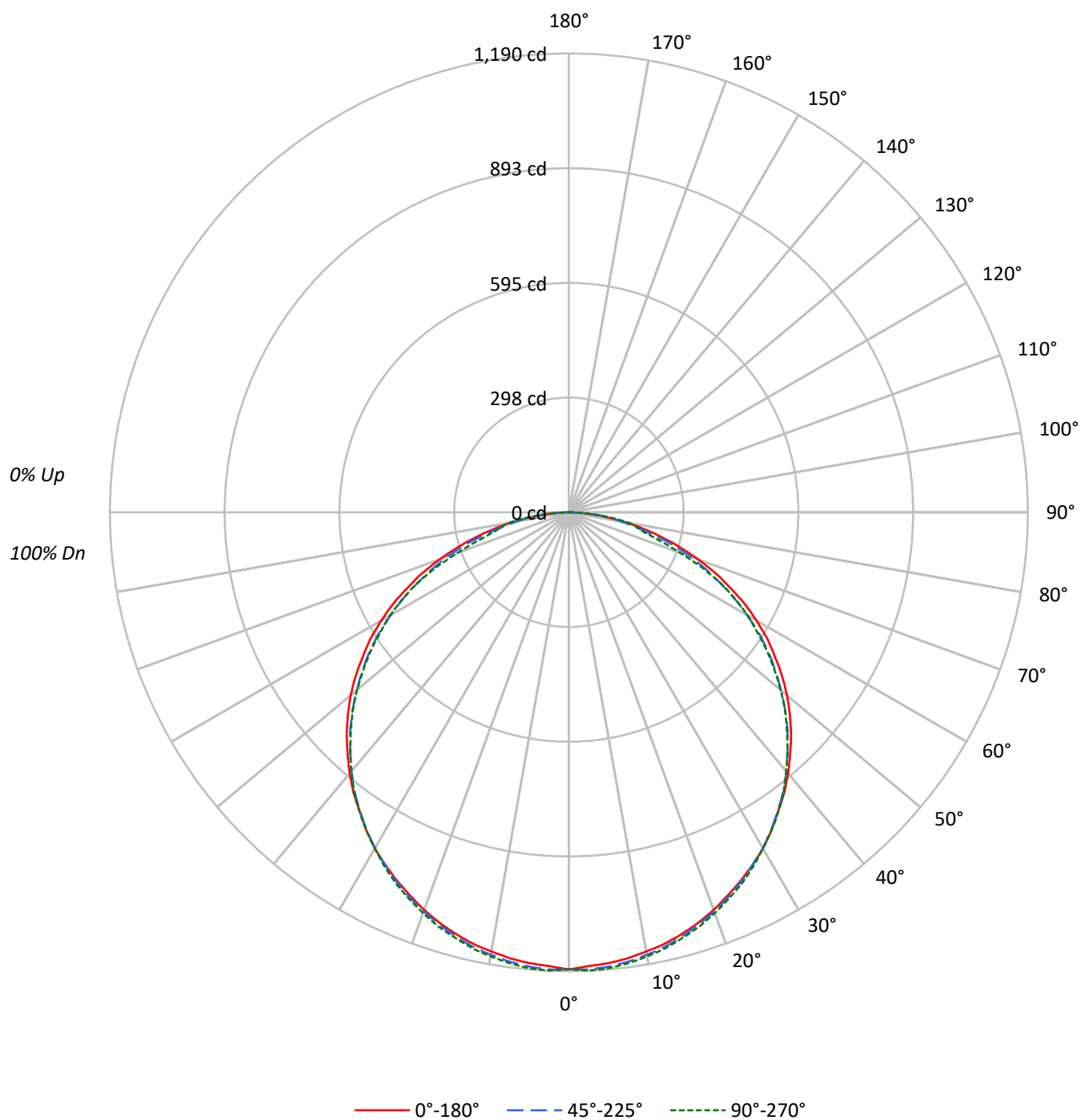
Input Watts (W): 31.4
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P183154

CATALOG NUMBER: 12EN-LD2-35-UNV-L830-CD1-U

Luminous Intensity Polar Plot





TEST NUMBER: P183154

CATALOG NUMBER: 12EN-LD2-35-UNV-L830-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	50	30	10	50	30	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	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	69	60	54	66	59	53	64	57	52	61	56	52	49		49
5	75	62	53	46	73	61	53	46	59	52	46	57	50	45	55	49	45	43		43
6	70	56	47	40	68	55	47	40	53	46	40	52	45	40	50	44	39	37		37
7	64	51	42	36	63	50	42	36	48	41	35	47	40	35	46	39	35	33		33
8	60	46	38	32	58	46	37	32	44	37	31	43	36	31	42	36	31	29		29
9	56	42	34	29	55	42	34	28	41	33	28	40	33	28	39	32	28	26		26
10	52	39	31	26	51	39	31	26	38	31	26	37	30	26	36	30	25	24		24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7262	7262	7262
5°	7219	7272	7299
10°	7195	7248	7275
15°	7180	7216	7244
20°	7155	7183	7211
25°	7126	7145	7174
30°	7120	7110	7120
35°	7075	7064	7086
40°	7070	7011	7011
45°	7059	6947	6922
50°	7037	6844	6831
55°	6962	6746	6700
60°	6873	6537	6555
65°	6668	6251	6271
70°	6380	5992	5476
75°	5906	5392	4812
80°	5292	4781	5596
85°	4260	4766	4766



TEST NUMBER: P183154

CATALOG NUMBER: 12EN-LD2-35-UNV-L830-CD1-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	112.2	3.2
10°-20°	321.0	9.3
20°-30°	487.3	14.1
30°-40°	591.7	17.1
40°-50°	620.2	18.0
50°-60°	567.4	16.4
60°-70°	434.4	12.6
70°-80°	243.9	7.1
80°-90°	75.1	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°	920.5	26.7
0°-40°	1512.2	43.8
0°-60°	2699.8	78.2
0°-90°	3453.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3453.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1185	1185	1185	1185	1185	
5°	1174	1177	1182	1185	1187	112
15°	1132	1133	1138	1141	1142	320
25°	1054	1054	1057	1058	1061	486
35°	946	946	944	944	947	593
45°	815	810	802	799	799	628
55°	652	648	632	624	627	583
65°	460	450	431	434	433	456
75°	250	241	228	206	203	265
85°	61	62	68	68	68	71
90°	0	0	0	0	0	



TEST NUMBER: P183154

CATALOG NUMBER: 12EN-LD2-35-UNV-L830-CD1-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1185.3	1185.3	1185.3	1185.3	1185.3
2.5°	1178.1	1181.0	1186.8	1189.7	1189.7
5°	1173.8	1176.7	1182.5	1185.3	1186.8
7.5°	1166.6	1169.5	1175.2	1179.6	1179.6
10°	1156.5	1159.4	1165.1	1169.5	1169.5
12.5°	1146.4	1147.8	1153.6	1156.5	1157.9
15°	1132.0	1133.4	1137.7	1140.6	1142.1
17.5°	1116.1	1116.1	1120.4	1123.3	1126.2
20°	1097.4	1098.8	1101.7	1104.6	1106.0
22.5°	1075.7	1077.2	1080.1	1083.0	1084.4
25°	1054.1	1054.1	1057.0	1058.4	1061.3
27.5°	1031.0	1031.0	1031.0	1032.5	1035.4
30°	1006.5	1005.1	1005.1	1003.6	1006.5
32.5°	977.7	977.7	976.2	974.8	977.7
35°	946.0	946.0	944.5	944.5	947.4
37.5°	917.1	915.7	912.8	909.9	914.2
40°	884.0	882.5	876.7	873.9	876.7
42.5°	849.3	846.5	839.3	836.4	839.3
45°	814.7	810.4	801.8	798.9	798.9
47.5°	777.2	772.9	761.4	757.1	759.9
50°	738.3	732.5	718.1	715.2	716.7
52.5°	696.5	689.3	674.9	672.0	672.0
55°	651.8	647.5	631.6	624.4	627.3
57.5°	610.0	601.3	584.0	575.4	579.7
60°	560.9	550.8	533.5	529.2	535.0
62.5°	513.4	501.8	484.5	481.6	486.0
65°	460.0	449.9	431.2	434.0	432.6
67.5°	411.0	399.4	383.6	376.4	372.0
70°	356.2	346.1	334.5	314.4	305.7
72.5°	302.8	294.2	282.6	255.2	249.5
75°	249.5	240.8	227.8	206.2	203.3
77.5°	199.0	193.2	174.5	174.5	181.7
80°	150.0	147.1	135.5	151.4	158.6
82.5°	100.9	98.1	109.6	115.4	113.9
85°	60.6	62.0	67.8	67.8	67.8
87.5°	26.0	28.8	30.3	30.3	31.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)