

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: P475362

Luminaire Tested: **14CZ2-35-UNV-L840-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P475362
Test Lab: INNOVATION CENTER(G3)
Issue Date: 02/10/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 14CZ2-35-UNV-L840-CD1-U
Description: 1'X4' TROFFER LED MODULE, RIBBED LENS
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

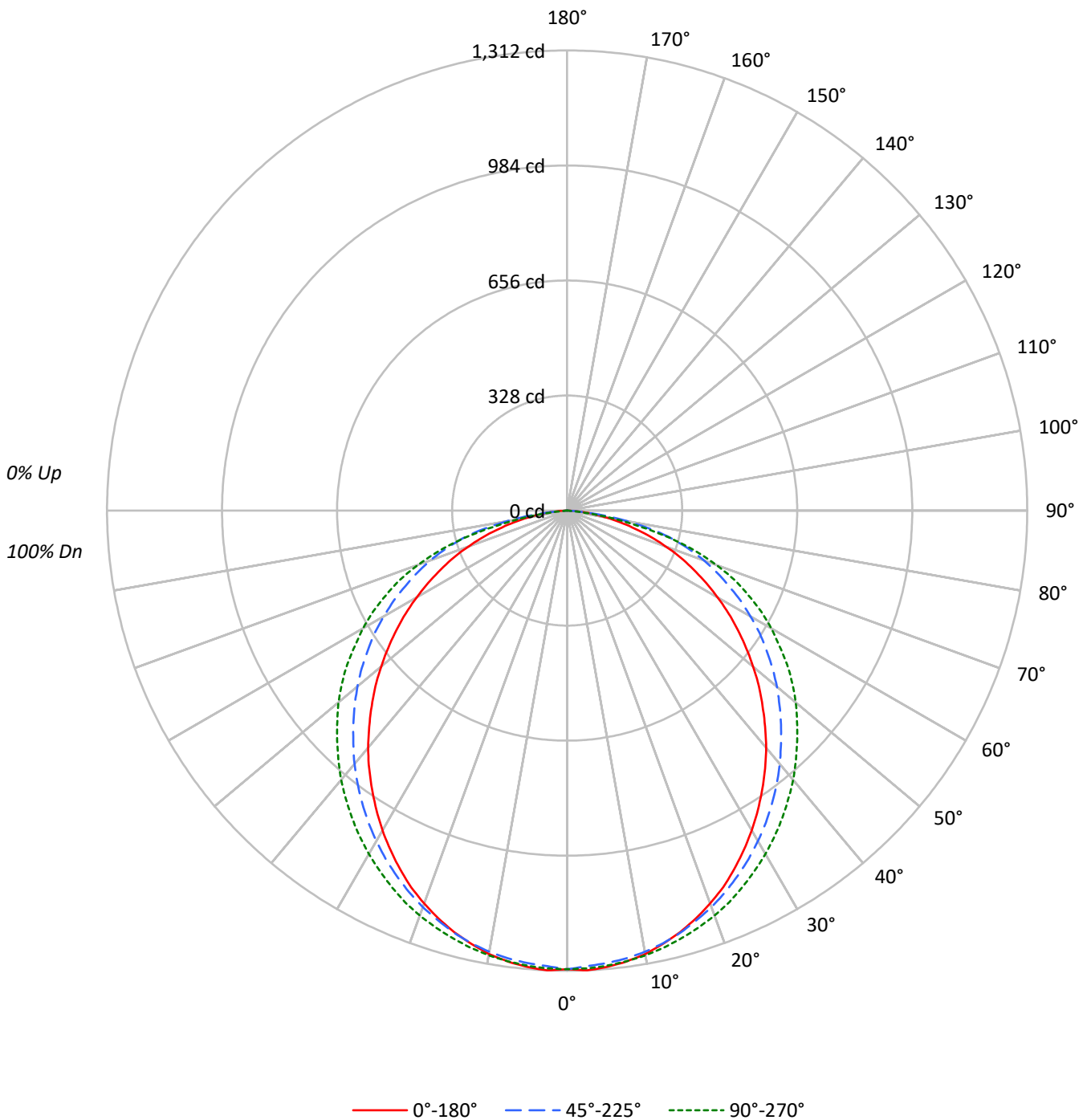
Lumens per Lamp: N/A
Luminaire Lumens: 3769.1 lumens
Efficiency: N/A
Efficacy: 132.3 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.29 / 1.37
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 28.5
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	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	96	106	102	98	94	97	94	91	93	91	88	90	88	86	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	68	60	54	66	59	53	64	57	52	61	56	51	49				49
5	75	62	53	46	73	61	53	46	59	51	46	57	50	45	55	49	45	42				42
6	69	56	47	40	68	55	46	40	53	46	40	51	45	39	50	44	39	37				37
7	64	51	42	36	63	50	41	35	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°	3519	3519	3519
5°	3529	3498	3518
10°	3507	3490	3518
15°	3467	3472	3516
20°	3414	3446	3518
25°	3348	3414	3515
30°	3272	3380	3514
35°	3186	3346	3513
40°	3101	3314	3522
45°	2999	3282	3530
50°	2897	3267	3563
55°	2787	3252	3593
60°	2664	3249	3619
65°	2528	3240	3626
70°	2355	3259	3557
75°	2088	3217	3190
80°	1751	2690	2173
85°	1229	1053	253



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	123.7	3.3
10°-20°	353.1	9.4
20°-30°	532.0	14.1
30°-40°	638.6	16.9
40°-50°	664.8	17.6
50°-60°	614.3	16.3
60°-70°	492.0	13.1
70°-80°	294.4	7.8
80°-90°	56.1	1.5
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°	1008.8	26.8
0°-40°	1647.4	43.7
0°-60°	2926.6	77.6
0°-90°	3769.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3769.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1308	1308	1308	1308	1308	
5°	1306	1303	1295	1304	1302	124
15°	1244	1244	1246	1262	1262	351
25°	1128	1134	1150	1179	1184	519
35°	970	984	1018	1059	1070	607
45°	788	811	862	914	928	608
55°	594	626	693	747	766	531
65°	397	438	509	559	570	394
75°	201	251	309	314	307	214
85°	40	58	34	14	8	51
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1307.6	1307.6	1307.6	1307.6	1307.6
2.5°	1312.0	1308.2	1300.0	1308.2	1306.3
5°	1306.3	1303.1	1294.9	1304.4	1302.5
7.5°	1296.8	1294.3	1288.0	1298.1	1296.2
10°	1283.6	1281.7	1277.3	1288.6	1287.4
12.5°	1265.3	1265.9	1263.4	1277.3	1276.0
15°	1244.4	1244.4	1246.3	1262.1	1262.1
17.5°	1219.8	1221.1	1224.9	1245.7	1246.3
20°	1192.0	1195.2	1203.4	1224.9	1228.6
22.5°	1162.4	1166.1	1177.5	1202.8	1208.4
25°	1127.6	1133.9	1149.7	1178.8	1183.8
27.5°	1091.0	1100.5	1120.1	1151.6	1157.9
30°	1053.1	1063.2	1087.9	1121.9	1130.8
32.5°	1012.1	1025.3	1055.0	1091.0	1101.1
35°	969.8	984.3	1018.4	1058.8	1069.5
37.5°	927.5	943.3	981.8	1025.3	1036.1
40°	882.7	901.0	943.3	988.1	1002.6
42.5°	835.3	855.5	902.2	951.5	965.4
45°	788.0	811.3	862.5	913.6	927.5
47.5°	741.9	765.9	821.4	874.4	889.0
50°	692.0	719.8	780.4	832.8	851.1
52.5°	643.4	674.3	738.1	791.1	809.4
55°	594.1	626.3	693.2	746.9	765.9
57.5°	546.1	580.2	650.9	704.0	717.2
60°	495.0	532.2	603.6	657.3	672.4
62.5°	447.0	485.5	557.5	609.3	623.8
65°	397.1	438.2	508.9	558.8	569.5
67.5°	350.4	391.4	462.8	505.7	516.5
70°	299.3	344.7	414.2	450.8	452.1
72.5°	250.7	296.7	364.3	387.7	384.5
75°	200.8	251.3	309.4	313.8	306.8
77.5°	155.9	206.5	246.2	232.3	218.5
80°	113.0	162.3	173.6	152.2	140.2
82.5°	74.5	113.6	104.8	75.1	64.4
85°	39.8	58.1	34.1	13.9	8.2
87.5°	15.2	10.1	3.8	3.2	2.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)