

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: P475353

Luminaire Tested: **14CZ2-35-UNV-L835-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P475353
Test Lab: INNOVATION CENTER(G3)
Issue Date: 02/10/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 14CZ2-35-UNV-L835-CD1-U
Description: 1'X4' TROFFER LED MODULE, RIBBED LENS
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

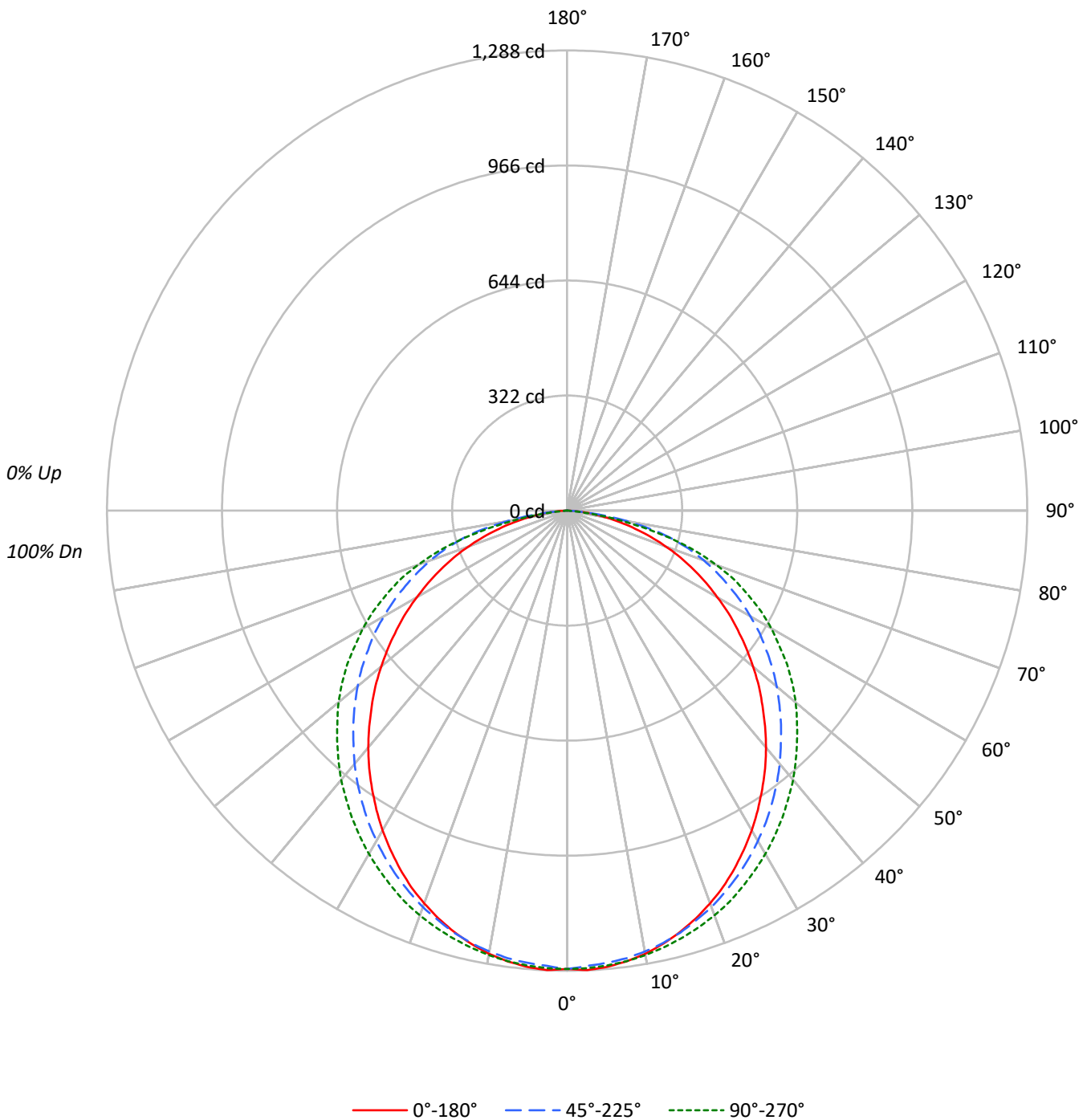
Lumens per Lamp: N/A
Luminaire Lumens: 3698.9 lumens
Efficiency: N/A
Efficacy: 129.8 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.29 / 1.37
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

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			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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	109	104	99	96	106	102	98	94	97	94	91	93	91	88	90	88	86	83
2	99	90	83	77	96	88	82	76	85	79	75	81	77	73	78	75	71	69
3	90	79	71	64	87	77	70	63	74	68	62	72	66	61	69	64	60	58
4	82	70	61	54	80	68	60	54	66	59	53	64	57	52	61	56	51	49
5	75	62	53	46	73	61	53	46	59	51	46	57	50	45	55	49	45	42
6	69	56	47	40	68	55	46	40	53	46	40	51	45	39	50	44	39	37
7	64	51	42	36	63	50	41	35	48	41	35	47	40	35	46	39	35	33
8	60	46	38	32	58	46	37	32	44	37	31	43	36	31	42	36	31	29
9	56	42	34	29	55	42	34	28	41	33	28	40	33	28	39	32	28	26
10	52	39	31	26	51	39	31	26	38	31	26	37	30	26	36	30	25	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3453	3453	3453
5°	3463	3433	3453
10°	3442	3425	3452
15°	3402	3407	3451
20°	3350	3382	3453
25°	3286	3350	3449
30°	3211	3317	3448
35°	3126	3283	3448
40°	3043	3252	3456
45°	2943	3221	3464
50°	2843	3206	3496
55°	2735	3192	3526
60°	2615	3188	3552
65°	2481	3180	3559
70°	2311	3198	3490
75°	2048	3157	3131
80°	1719	2641	2132
85°	1204	1034	250



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	121.4	3.3
10°-20°	346.5	9.4
20°-30°	522.1	14.1
30°-40°	626.7	16.9
40°-50°	652.4	17.6
50°-60°	602.9	16.3
60°-70°	482.9	13.1
70°-80°	288.9	7.8
80°-90°	55.1	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°	990.0	26.8
0°-40°	1616.7	43.7
0°-60°	2872.0	77.6
0°-90°	3698.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3698.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1283	1283	1283	1283	1283	
5°	1282	1279	1271	1280	1278	122
15°	1221	1221	1223	1239	1239	344
25°	1107	1113	1128	1157	1162	510
35°	952	966	999	1039	1050	596
45°	773	796	846	897	910	597
55°	583	615	680	733	752	522
65°	390	430	499	548	559	386
75°	197	247	304	308	301	210
85°	39	57	34	14	8	50
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1283.2	1283.2	1283.2	1283.2	1283.2
2.5°	1287.5	1283.8	1275.8	1283.8	1281.9
5°	1281.9	1278.9	1270.8	1280.1	1278.2
7.5°	1272.7	1270.2	1264.0	1273.9	1272.0
10°	1259.6	1257.8	1253.4	1264.6	1263.4
12.5°	1241.7	1242.3	1239.8	1253.4	1252.2
15°	1221.2	1221.2	1223.1	1238.6	1238.6
17.5°	1197.1	1198.3	1202.0	1222.5	1223.1
20°	1169.8	1172.9	1181.0	1202.0	1205.7
22.5°	1140.7	1144.4	1155.6	1180.3	1185.9
25°	1106.6	1112.8	1128.3	1156.8	1161.7
27.5°	1070.7	1080.0	1099.2	1130.1	1136.3
30°	1033.5	1043.4	1067.6	1101.0	1109.7
32.5°	993.2	1006.2	1035.3	1070.7	1080.6
35°	951.7	966.0	999.4	1039.1	1049.6
37.5°	910.2	925.7	963.5	1006.2	1016.8
40°	866.2	884.2	925.7	969.7	983.9
42.5°	819.7	839.6	885.4	933.7	947.4
45°	773.3	796.2	846.4	896.6	910.2
47.5°	728.0	751.6	806.1	858.1	872.4
50°	679.1	706.3	765.8	817.2	835.2
52.5°	631.4	661.7	724.3	776.4	794.3
55°	583.0	614.6	680.3	733.0	751.6
57.5°	536.0	569.4	638.8	690.9	703.9
60°	485.8	522.3	592.3	645.0	659.9
62.5°	438.7	476.5	547.1	597.9	612.2
65°	389.7	430.0	499.4	548.3	558.9
67.5°	343.9	384.2	454.2	496.3	506.8
70°	293.7	338.3	406.5	442.4	443.6
72.5°	246.0	291.2	357.5	380.4	377.3
75°	197.0	246.6	303.6	307.9	301.1
77.5°	153.0	202.6	241.6	228.0	214.4
80°	110.9	159.2	170.4	149.3	137.6
82.5°	73.1	111.5	102.9	73.7	63.2
85°	39.0	57.0	33.5	13.6	8.1
87.5°	14.9	9.9	3.7	3.1	2.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)