

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: P475389

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

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P475389
Test Lab: INNOVATION CENTER(G3)
Issue Date: 02/10/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 14CZ2-35-S-UNV-L835-CD1-U
Description: 1'X4' TROFFER LED MODULE, SMOOTH LENS
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

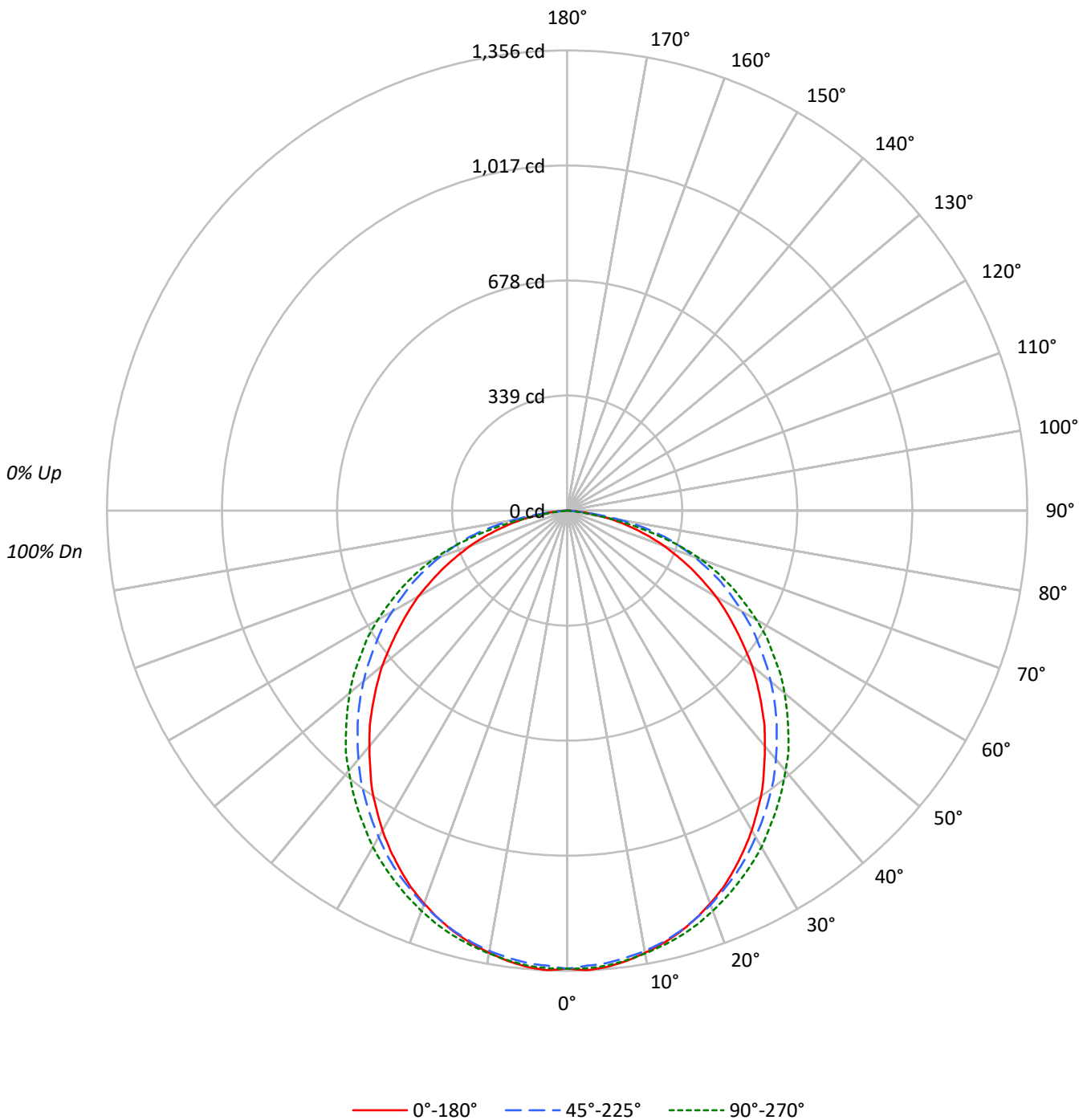
Lumens per Lamp: N/A
Luminaire Lumens: 3773.4 lumens
Efficiency: N/A
Efficacy: 132.4 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.26 / 1.36
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	109	104	100	96	106	102	98	94	98	94	91	94	91	89	90	88	86	84
2	99	91	84	78	96	89	82	77	85	80	75	82	77	74	79	75	72	70
3	90	79	71	65	88	78	70	64	75	68	63	72	67	62	70	65	61	59
4	82	70	61	55	80	69	61	54	66	59	54	64	58	53	62	57	52	50
5	76	63	54	47	74	62	53	47	60	52	46	58	51	46	56	50	45	43
6	70	57	48	41	68	56	47	41	54	46	40	52	45	40	50	44	40	38
7	65	51	42	36	63	50	42	36	49	41	36	47	41	36	46	40	35	33
8	60	47	38	32	59	46	38	32	45	37	32	43	37	32	42	36	32	30
9	56	43	35	29	55	42	34	29	41	34	29	40	33	29	39	33	29	27
10	53	40	32	26	52	39	31	26	38	31	26	37	31	26	36	30	26	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3633	3633	3633
5°	3646	3616	3636
10°	3616	3601	3621
15°	3581	3576	3613
20°	3529	3540	3594
25°	3462	3502	3575
30°	3382	3452	3558
35°	3295	3407	3531
40°	3184	3364	3517
45°	3081	3319	3506
50°	2977	3278	3500
55°	2837	3238	3478
60°	2724	3204	3469
65°	2559	3187	3417
70°	2387	3133	3297
75°	2110	3075	2779
80°	1705	2498	1646
85°	1229	704	176



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	127.6	3.4
10°-20°	363.5	9.6
20°-30°	545.3	14.5
30°-40°	650.1	17.2
40°-50°	671.2	17.8
50°-60°	611.4	16.2
60°-70°	479.0	12.7
70°-80°	277.2	7.3
80°-90°	48.2	1.3
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°	1036.5	27.5
0°-40°	1686.5	44.7
0°-60°	2969.1	78.7
0°-90°	3773.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3773.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1350	1350	1350	1350	1350	
5°	1350	1346	1339	1348	1346	128
15°	1286	1284	1284	1297	1297	362
25°	1166	1170	1179	1202	1204	537
35°	1003	1012	1037	1069	1075	626
45°	810	830	872	912	921	625
55°	605	635	690	734	741	542
65°	402	438	500	533	537	398
75°	203	246	296	286	267	216
85°	40	53	23	8	6	49
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1349.9	1349.9	1349.9	1349.9	1349.9
2.5°	1355.6	1349.9	1342.3	1349.9	1349.9
5°	1349.9	1346.1	1338.6	1348.0	1346.1
7.5°	1338.6	1334.8	1329.1	1338.6	1336.7
10°	1323.4	1321.5	1317.7	1329.1	1325.3
12.5°	1306.3	1304.4	1302.5	1313.9	1312.0
15°	1285.5	1283.6	1283.6	1296.8	1296.8
17.5°	1260.8	1260.8	1260.8	1277.9	1277.9
20°	1232.4	1232.4	1236.2	1255.1	1255.1
22.5°	1202.0	1202.0	1207.7	1228.6	1230.5
25°	1166.0	1169.8	1179.3	1202.0	1203.9
27.5°	1128.1	1133.8	1147.1	1171.7	1175.5
30°	1088.3	1094.0	1111.0	1139.5	1145.2
32.5°	1044.7	1054.2	1075.0	1103.5	1109.1
35°	1003.0	1012.4	1037.1	1069.3	1075.0
37.5°	953.7	968.8	999.2	1029.5	1039.0
40°	906.3	923.3	957.5	993.5	1001.1
42.5°	860.8	875.9	913.9	953.7	965.0
45°	809.6	830.4	872.1	912.0	921.4
47.5°	760.3	781.1	828.5	870.3	879.7
50°	711.0	731.8	783.0	824.7	836.1
52.5°	656.0	686.3	737.5	779.2	792.5
55°	604.8	635.1	690.1	733.7	741.3
57.5°	555.5	585.9	646.5	686.3	697.7
60°	506.2	536.6	595.3	635.1	644.6
62.5°	453.1	487.3	547.9	582.1	589.6
65°	401.9	438.0	500.5	532.8	536.6
67.5°	350.8	388.7	449.3	475.9	479.7
70°	303.4	341.3	398.2	422.8	419.0
72.5°	254.1	292.0	347.0	360.2	348.9
75°	202.9	246.5	295.8	286.3	267.3
77.5°	157.4	199.1	231.3	202.9	187.7
80°	110.0	153.6	161.2	125.1	106.2
82.5°	72.0	108.1	87.2	53.1	47.4
85°	39.8	53.1	22.8	7.6	5.7
87.5°	13.3	7.6	3.8	1.9	1.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)