

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: P475398

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

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P475398
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-L840-CD1-U
Description: 1'X4' TROFFER LED MODULE, SMOOTH LENS
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

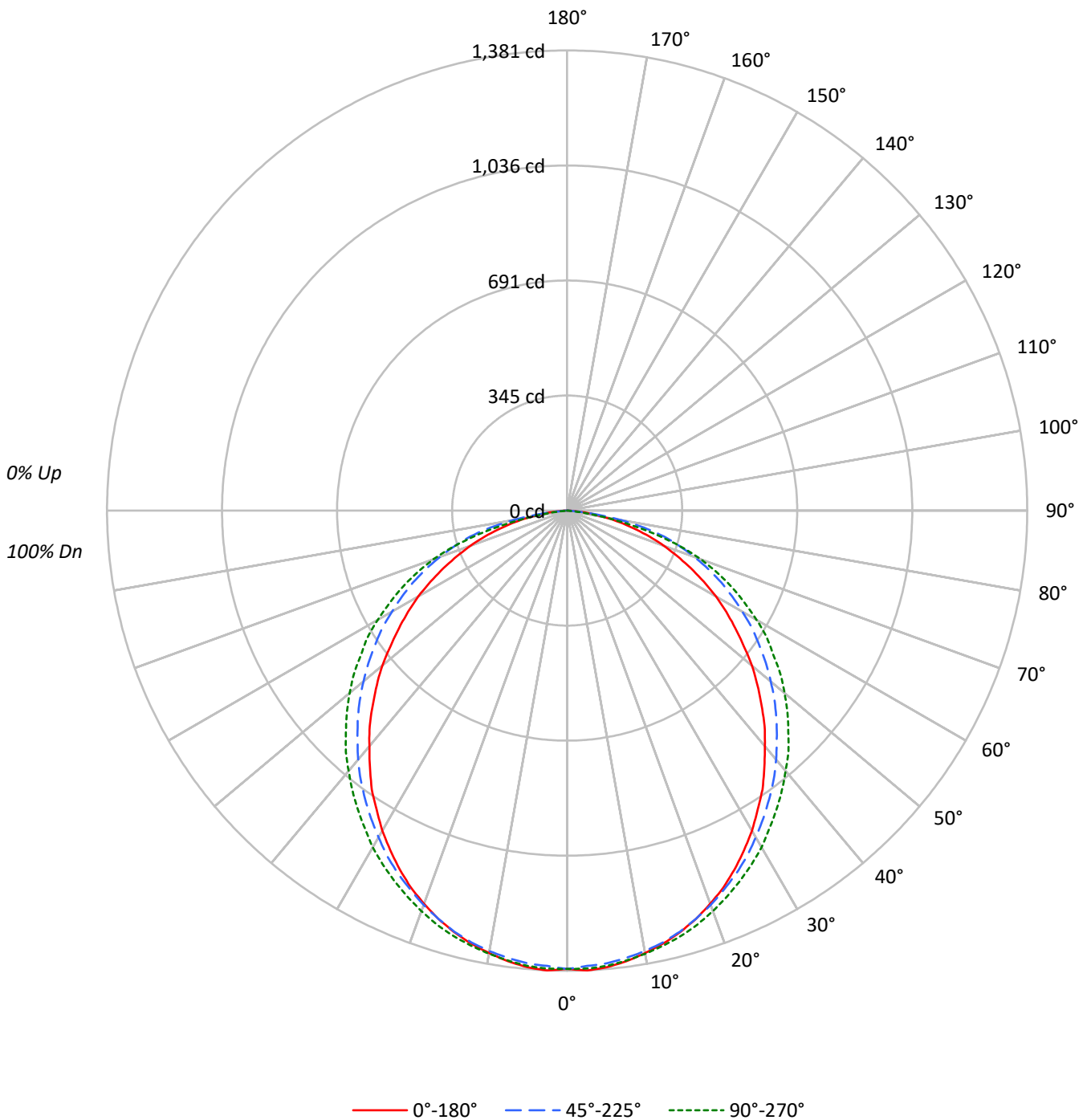
Lumens per Lamp: N/A
Luminaire Lumens: 3845.1 lumens
Efficiency: N/A
Efficacy: 134.9 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.26 / 1.36
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

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°	3702	3702	3702
5°	3716	3685	3705
10°	3685	3669	3690
15°	3649	3644	3682
20°	3596	3607	3663
25°	3528	3568	3643
30°	3446	3518	3626
35°	3357	3472	3598
40°	3244	3427	3583
45°	3140	3382	3573
50°	3033	3340	3567
55°	2891	3299	3544
60°	2776	3265	3535
65°	2608	3247	3482
70°	2432	3192	3360
75°	2149	3134	2832
80°	1737	2545	1677
85°	1254	716	179



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	130.1	3.4
10°-20°	370.4	9.6
20°-30°	555.7	14.5
30°-40°	662.4	17.2
40°-50°	684.0	17.8
50°-60°	623.0	16.2
60°-70°	488.1	12.7
70°-80°	282.4	7.3
80°-90°	49.1	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°	1056.2	27.5
0°-40°	1718.6	44.7
0°-60°	3025.6	78.7
0°-90°	3845.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3845.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1376	1376	1376	1376	1376	
5°	1376	1372	1364	1374	1372	130
15°	1310	1308	1308	1322	1322	369
25°	1188	1192	1202	1225	1227	547
35°	1022	1032	1057	1090	1095	638
45°	825	846	889	929	939	637
55°	616	647	703	748	755	552
65°	410	446	510	543	547	406
75°	207	251	301	292	272	220
85°	41	54	23	8	6	50
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1375.6	1375.6	1375.6	1375.6	1375.6
2.5°	1381.4	1375.6	1367.9	1375.6	1375.6
5°	1375.6	1371.7	1364.0	1373.6	1371.7
7.5°	1364.0	1360.1	1354.3	1364.0	1362.1
10°	1348.5	1346.6	1342.7	1354.3	1350.5
12.5°	1331.1	1329.2	1327.3	1338.9	1336.9
15°	1309.9	1308.0	1308.0	1321.5	1321.5
17.5°	1284.8	1284.8	1284.8	1302.2	1302.2
20°	1255.8	1255.8	1259.7	1279.0	1279.0
22.5°	1224.9	1224.9	1230.7	1251.9	1253.9
25°	1188.2	1192.0	1201.7	1224.9	1226.8
27.5°	1149.5	1155.3	1168.9	1194.0	1197.8
30°	1109.0	1114.8	1132.1	1161.1	1166.9
32.5°	1064.5	1074.2	1095.4	1124.4	1130.2
35°	1022.0	1031.7	1056.8	1089.6	1095.4
37.5°	971.8	987.2	1018.2	1049.1	1058.7
40°	923.5	940.9	975.7	1012.4	1020.1
42.5°	877.1	892.6	931.2	971.8	983.4
45°	825.0	846.2	888.7	929.3	938.9
47.5°	774.7	796.0	844.3	886.8	896.4
50°	724.5	745.7	797.9	840.4	852.0
52.5°	668.5	699.4	751.5	794.0	807.6
55°	616.3	647.2	703.2	747.7	755.4
57.5°	566.1	597.0	658.8	699.4	711.0
60°	515.8	546.8	606.6	647.2	656.9
62.5°	461.7	496.5	558.3	593.1	600.8
65°	409.6	446.3	510.0	542.9	546.8
67.5°	357.4	396.1	457.9	484.9	488.8
70°	309.1	347.8	405.7	430.8	427.0
72.5°	258.9	297.5	353.6	367.1	355.5
75°	206.7	251.2	301.4	291.7	272.4
77.5°	160.4	202.9	235.7	206.7	191.3
80°	112.1	156.5	164.2	127.5	108.2
82.5°	73.4	110.1	88.9	54.1	48.3
85°	40.6	54.1	23.2	7.7	5.8
87.5°	13.5	7.7	3.9	1.9	1.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)