

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: P272057

Luminaire Tested: **24CZ2-30-UNV-L930-CD1-U**

Issue Date: 3/3/2020

This test was performed under the Supervised Manufacturer's Testing Program. The results of this test have not been influenced by sources from within Cooper Lighting Solutions or from external interests.

Test Information

Test Method: LM-79-08
Report Number: P272057
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-15)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ2-30-UNV-L930-CD1-U
Description: 2'x4' TROFFER LED MODULE,RIBBED LENS, 90CRI
Light Source: (84) 3000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER
Luminaire Equipment: Sample No. Condition Description

Summary

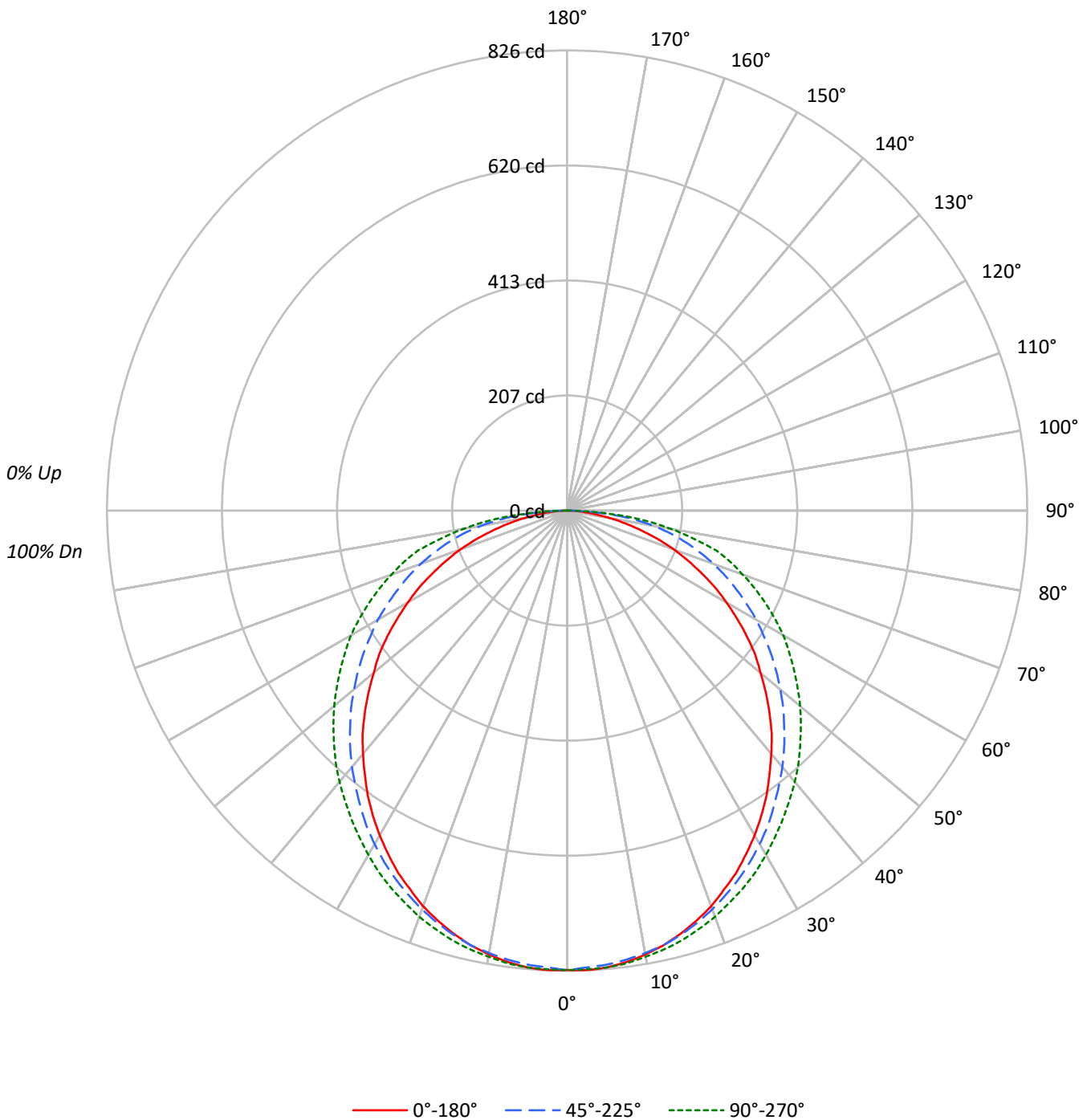
Lumens per Lamp: N/A
Luminaire Lumens: 2501.0 lumens
Efficiency: N/A
Efficacy: 103.3 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.29 / 1.38
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 24.2
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



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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	108	103	98	94	105	100	96	92	96	92	89	92	89	87	88	86	84	82
2	98	89	81	75	95	87	80	74	83	78	73	80	75	71	77	73	69	67
3	89	77	69	62	86	76	68	61	73	66	60	70	64	59	67	62	58	56
4	81	68	59	52	79	67	58	52	64	57	51	62	56	50	60	54	50	47
5	74	61	52	45	72	60	51	44	58	50	44	56	49	43	54	48	43	41
6	69	55	46	39	67	54	45	39	52	44	38	50	43	38	49	42	38	36
7	64	50	41	34	62	49	40	34	47	39	34	46	39	34	44	38	33	31
8	59	45	37	31	57	45	36	30	43	36	30	42	35	30	41	34	30	28
9	55	41	33	27	54	41	33	27	40	32	27	39	32	27	38	31	27	25
10	52	38	30	25	50	38	30	25	37	30	25	36	29	25	35	29	24	23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1110	1110	1110
5°	1112	1105	1112
10°	1105	1102	1111
15°	1096	1098	1112
20°	1082	1091	1111
25°	1066	1083	1110
30°	1046	1074	1109
35°	1025	1063	1109
40°	1001	1055	1116
45°	977	1048	1126
50°	948	1046	1143
55°	924	1047	1166
60°	889	1056	1206
65°	848	1067	1250
70°	803	1100	1319
75°	716	1147	1441
80°	611	1215	1472
85°	435	1204	1409



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	78.1	3.1
10°-20°	223.2	8.9
20°-30°	337.1	13.5
30°-40°	406.3	16.2
40°-50°	426.6	17.1
50°-60°	399.1	16.0
60°-70°	329.6	13.2
70°-80°	224.6	9.0
80°-90°	76.6	3.1
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°	638.4	25.5
0°-40°	1044.7	41.8
0°-60°	1870.3	74.8
0°-90°	2501.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2501.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	825	825	825	825	825	
5°	823	822	818	823	823	78
15°	787	788	788	797	798	222
25°	718	721	729	744	748	330
35°	624	631	647	669	675	390
45°	514	524	551	581	592	396
55°	394	410	446	483	497	352
65°	266	289	335	378	392	264
75°	138	169	221	262	277	147
85°	28	56	78	88	91	35
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	824.8	824.8	824.8	824.8	824.8
2.5°	825.6	824.8	820.7	824.8	824.0
5°	823.1	822.3	818.2	823.1	823.1
7.5°	817.3	817.3	813.2	819.0	819.8
10°	809.0	809.0	806.6	813.2	813.2
12.5°	799.1	799.1	799.1	805.7	806.6
15°	786.6	787.5	788.3	796.6	798.3
17.5°	771.7	773.4	775.9	785.8	787.5
20°	755.9	757.6	761.7	773.4	775.9
22.5°	736.0	740.2	746.0	759.3	761.7
25°	717.8	721.1	729.4	743.5	747.6
27.5°	695.4	700.3	711.1	726.1	731.9
30°	673.0	677.9	691.2	708.6	713.6
32.5°	648.9	656.4	670.5	688.7	694.5
35°	624.0	630.6	647.2	668.8	675.4
37.5°	596.6	605.7	624.0	647.2	655.5
40°	570.1	580.0	600.8	625.7	635.6
42.5°	543.5	553.5	576.7	604.9	614.9
45°	513.6	524.4	551.0	580.9	591.6
47.5°	483.8	497.0	526.1	557.6	569.2
50°	453.1	468.0	499.5	532.7	546.0
52.5°	425.7	439.8	473.0	508.7	521.1
55°	394.1	409.9	446.4	482.9	497.0
57.5°	361.8	379.2	418.2	458.0	472.1
60°	330.3	349.3	392.5	432.3	448.1
62.5°	299.6	318.6	363.4	404.9	420.7
65°	266.4	288.8	335.2	377.6	392.5
67.5°	234.8	258.9	307.9	349.3	364.3
70°	204.1	227.4	279.6	320.3	335.2
72.5°	170.9	197.5	249.8	292.1	307.9
75°	137.7	169.3	220.7	262.2	277.1
77.5°	107.0	139.4	190.9	224.9	232.3
80°	78.8	112.0	156.8	180.9	190.0
82.5°	50.6	83.8	119.5	136.9	144.4
85°	28.2	55.6	78.0	88.0	91.3
87.5°	11.6	24.1	31.5	35.7	35.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)