

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: P271948

Luminaire Tested: **14CZ2-39-S-UNV-L950-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: P271948
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-40)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 14CZ2-39-S-UNV-L950-CD1-U
Description: 1'X4' TROFFER LED MODULE,SMOOTH LENS, 90CRI
Light Source: (112) 5000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER
Luminaire Equipment: Sample No. Condition Description

Summary

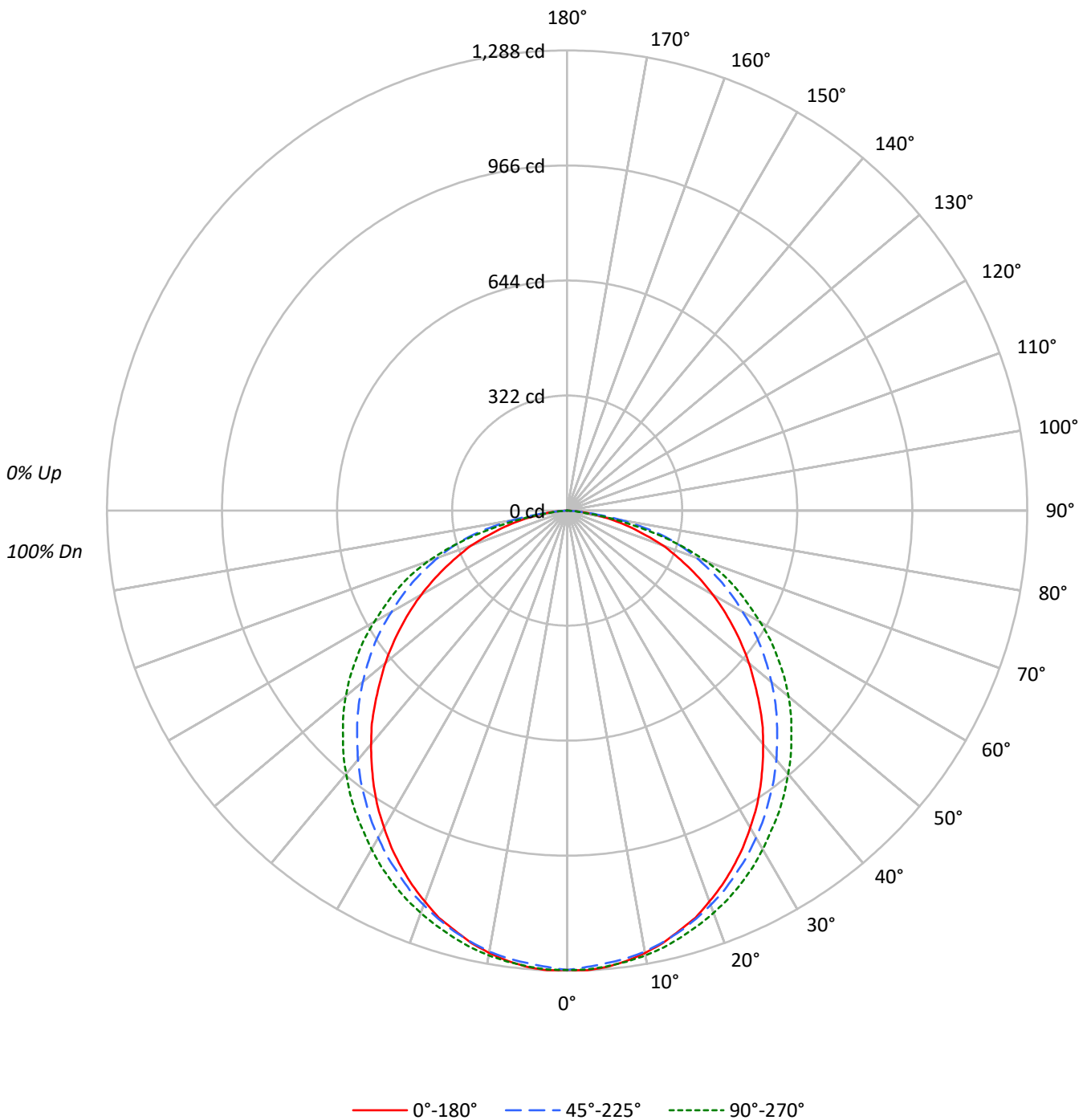
Lumens per Lamp: N/A
Luminaire Lumens: 3602.0 lumens
Efficiency: N/A
Efficacy: 111.5 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.26 / 1.36
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 32.3
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	109	104	100	96	106	102	98	94	97	94	91	94	91	89	90	88	86	84
2	99	90	84	78	96	89	82	77	85	80	75	82	77	73	79	75	72	70
3	90	79	71	65	87	78	70	64	75	68	63	72	66	62	69	65	61	58
4	82	70	61	55	80	69	61	54	66	59	53	64	58	53	62	56	52	50
5	76	63	54	47	74	62	53	47	59	52	46	57	51	46	56	50	45	43
6	70	56	47	41	68	55	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	35	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	28	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°	3460	3460	3460
5°	3464	3435	3459
10°	3436	3426	3455
15°	3388	3398	3443
20°	3334	3365	3432
25°	3266	3325	3420
30°	3185	3285	3402
35°	3098	3238	3391
40°	2999	3199	3381
45°	2888	3160	3378
50°	2781	3125	3387
55°	2664	3100	3377
60°	2538	3056	3355
65°	2388	3047	3354
70°	2248	3021	3260
75°	1949	2953	2785
80°	1578	2380	1855
85°	1047	827	553



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	121.4	3.4
10°-20°	345.5	9.6
20°-30°	518.3	14.4
30°-40°	618.3	17.2
40°-50°	639.2	17.7
50°-60°	583.5	16.2
60°-70°	459.2	12.7
70°-80°	267.3	7.4
80°-90°	49.3	1.4
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°	985.2	27.4
0°-40°	1603.5	44.5
0°-60°	2826.2	78.5
0°-90°	3602.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3602.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1286	1286	1286	1286	1286	
5°	1282	1279	1272	1282	1280	122
15°	1216	1218	1220	1236	1236	343
25°	1100	1106	1120	1147	1152	506
35°	943	956	986	1023	1032	589
45°	759	784	830	877	888	586
55°	568	598	661	709	720	508
65°	375	414	479	516	527	372
75°	188	232	284	279	268	199
85°	34	48	27	21	18	44
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1285.9	1285.9	1285.9	1285.9	1285.9
2.5°	1287.6	1284.1	1278.7	1287.6	1285.9
5°	1282.3	1278.7	1271.6	1282.3	1280.5
7.5°	1271.6	1268.0	1264.4	1275.1	1273.4
10°	1257.3	1255.5	1253.7	1266.2	1264.4
12.5°	1239.4	1239.4	1237.6	1251.9	1251.9
15°	1216.2	1218.0	1219.8	1235.8	1235.8
17.5°	1194.8	1193.0	1198.3	1216.2	1218.0
20°	1164.4	1168.0	1175.1	1196.6	1198.3
22.5°	1134.1	1137.6	1150.1	1171.6	1176.9
25°	1100.1	1105.5	1119.8	1146.6	1151.9
27.5°	1064.4	1071.5	1091.2	1119.8	1125.1
30°	1025.1	1035.8	1057.3	1089.4	1094.8
32.5°	985.8	996.5	1023.3	1055.5	1062.6
35°	943.0	955.5	985.8	1023.3	1032.3
37.5°	898.3	914.4	950.1	987.6	998.3
40°	853.7	871.5	910.8	950.1	962.6
42.5°	809.0	826.9	869.7	914.4	926.9
45°	759.0	784.0	830.4	876.9	887.6
47.5°	710.8	737.6	789.4	835.8	850.1
50°	664.4	691.1	746.5	794.7	809.0
52.5°	616.1	644.7	703.6	753.7	766.2
55°	567.9	598.3	660.8	709.0	719.7
57.5°	519.7	551.8	616.1	662.6	675.1
60°	471.5	505.4	567.9	614.4	623.3
62.5°	423.3	459.0	523.3	564.3	573.3
65°	375.0	414.3	478.6	516.1	526.8
67.5°	328.6	367.9	430.4	466.1	475.1
70°	285.7	321.5	384.0	410.8	414.3
72.5°	232.2	276.8	337.5	351.8	342.9
75°	187.5	232.2	284.0	278.6	267.9
77.5°	142.9	187.5	221.5	203.6	189.3
80°	101.8	146.4	153.6	126.8	119.7
82.5°	66.1	101.8	85.7	66.1	53.6
85°	33.9	48.2	26.8	21.4	17.9
87.5°	10.7	7.1	3.6	3.6	1.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)