

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: P271954

Luminaire Tested: **14CZ2-39HE-S-UNV-L935-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: P271954
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: 14CZ2-39HE-S-UNV-L935-CD1-U
Description: 1'X4' TROFFER LED MODULE,SMOOTH LENS, 90CRI
Light Source: (196) 3500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER
Luminaire Equipment: Sample No. Condition Description

Summary

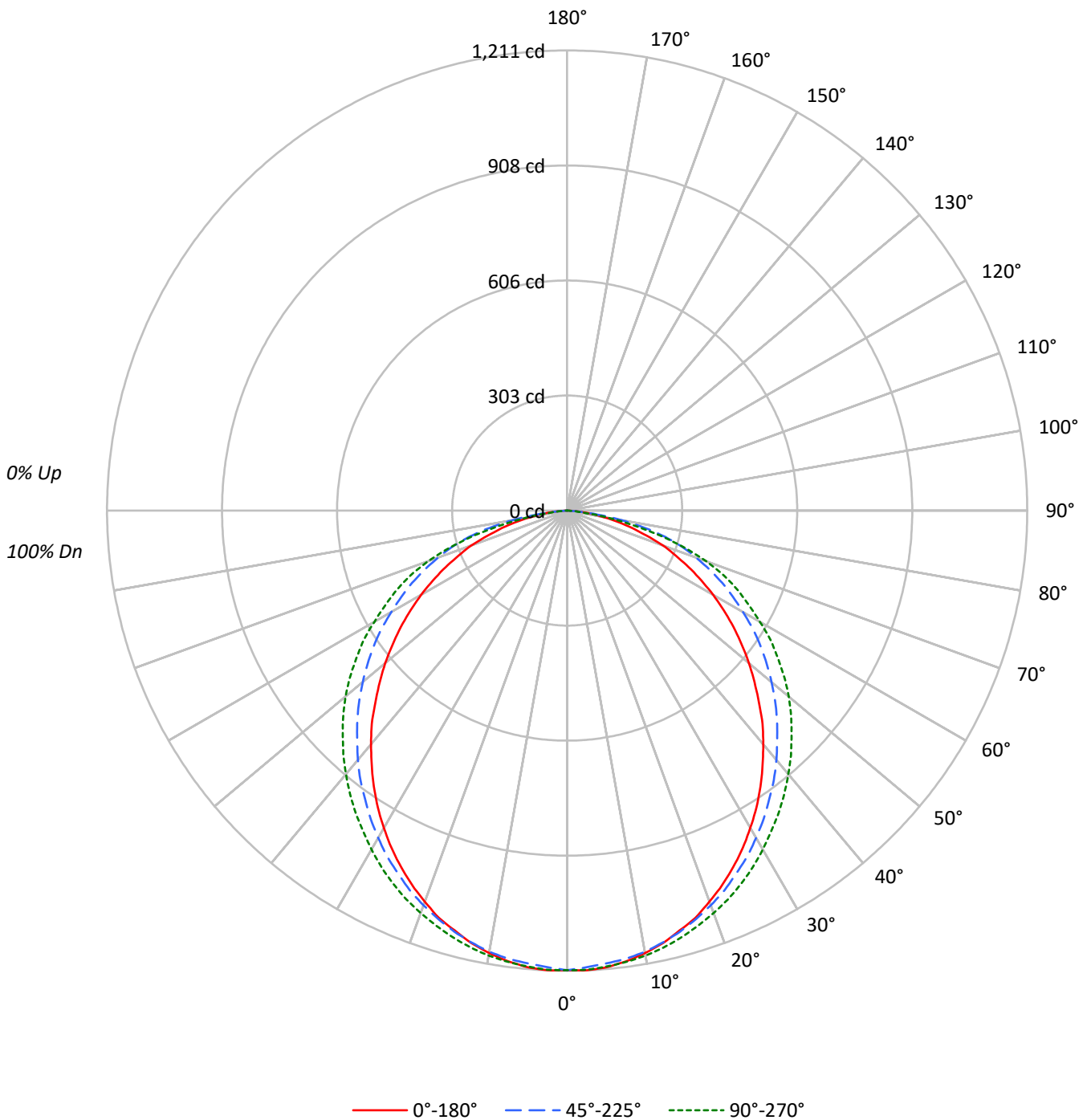
Lumens per Lamp: N/A
Luminaire Lumens: 3388.0 lumens
Efficiency: N/A
Efficacy: 115.6 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.26 / 1.36
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 29.3
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°	3255	3255	3255
5°	3258	3231	3253
10°	3231	3222	3250
15°	3187	3196	3238
20°	3136	3165	3228
25°	3072	3127	3217
30°	2996	3090	3200
35°	2914	3046	3189
40°	2820	3009	3181
45°	2717	2973	3177
50°	2616	2940	3186
55°	2506	2916	3176
60°	2387	2875	3155
65°	2246	2867	3155
70°	2115	2842	3066
75°	1834	2777	2620
80°	1483	2239	1743
85°	985	778	519



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	114.2	3.4
10°-20°	325.0	9.6
20°-30°	487.5	14.4
30°-40°	581.5	17.2
40°-50°	601.2	17.7
50°-60°	548.9	16.2
60°-70°	431.9	12.7
70°-80°	251.4	7.4
80°-90°	46.3	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°	926.7	27.4
0°-40°	1508.2	44.5
0°-60°	2658.3	78.5
0°-90°	3388.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3388.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1210	1210	1210	1210	1210	
5°	1206	1203	1196	1206	1204	114
15°	1144	1146	1147	1162	1162	323
25°	1035	1040	1053	1078	1084	476
35°	887	899	927	962	971	554
45°	714	737	781	825	835	551
55°	534	563	622	667	677	478
65°	353	390	450	486	496	350
75°	176	218	267	262	252	187
85°	32	45	25	20	17	41
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1209.5	1209.5	1209.5	1209.5	1209.5
2.5°	1211.1	1207.8	1202.7	1211.1	1209.5
5°	1206.1	1202.7	1196.0	1206.1	1204.4
7.5°	1196.0	1192.7	1189.3	1199.4	1197.7
10°	1182.6	1180.9	1179.2	1191.0	1189.3
12.5°	1165.8	1165.8	1164.1	1177.5	1177.5
15°	1143.9	1145.6	1147.3	1162.4	1162.4
17.5°	1123.8	1122.1	1127.1	1143.9	1145.6
20°	1095.2	1098.6	1105.3	1125.5	1127.1
22.5°	1066.7	1070.0	1081.8	1102.0	1107.0
25°	1034.8	1039.8	1053.2	1078.4	1083.5
27.5°	1001.2	1007.9	1026.4	1053.2	1058.3
30°	964.2	974.3	994.4	1024.7	1029.7
32.5°	927.3	937.3	962.5	992.8	999.5
35°	886.9	898.7	927.3	962.5	970.9
37.5°	844.9	860.1	893.7	928.9	939.0
40°	802.9	819.7	856.7	893.7	905.4
42.5°	761.0	777.7	818.1	860.1	871.8
45°	713.9	737.4	781.1	824.8	834.9
47.5°	668.6	693.8	742.5	786.1	799.6
50°	624.9	650.1	702.2	747.5	761.0
52.5°	579.5	606.4	661.8	708.9	720.6
55°	534.2	562.7	621.5	666.9	677.0
57.5°	488.8	519.1	579.5	623.2	635.0
60°	443.5	475.4	534.2	577.9	586.3
62.5°	398.1	431.7	492.2	530.8	539.2
65°	352.8	389.7	450.2	485.5	495.5
67.5°	309.1	346.0	404.8	438.4	446.8
70°	268.8	302.4	361.2	386.4	389.7
72.5°	218.4	260.4	317.5	330.9	322.5
75°	176.4	218.4	267.1	262.0	252.0
77.5°	134.4	176.4	208.3	191.5	178.1
80°	95.7	137.7	144.5	119.3	112.5
82.5°	62.2	95.7	80.6	62.2	50.4
85°	31.9	45.4	25.2	20.2	16.8
87.5°	10.1	6.7	3.4	3.4	1.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)