

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: P271920

Luminaire Tested: **14CZ2-39HE-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: P271920
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-49)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 14CZ2-39HE-UNV-L950-CD1-U
Description: 1'X4' TROFFER LED MODULE,RIBBED LENS, 90CRI
Light Source: (196) 5000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER
Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3595.0 lumens
Efficiency: N/A
Efficacy: 122.7 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.28 / 1.37
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

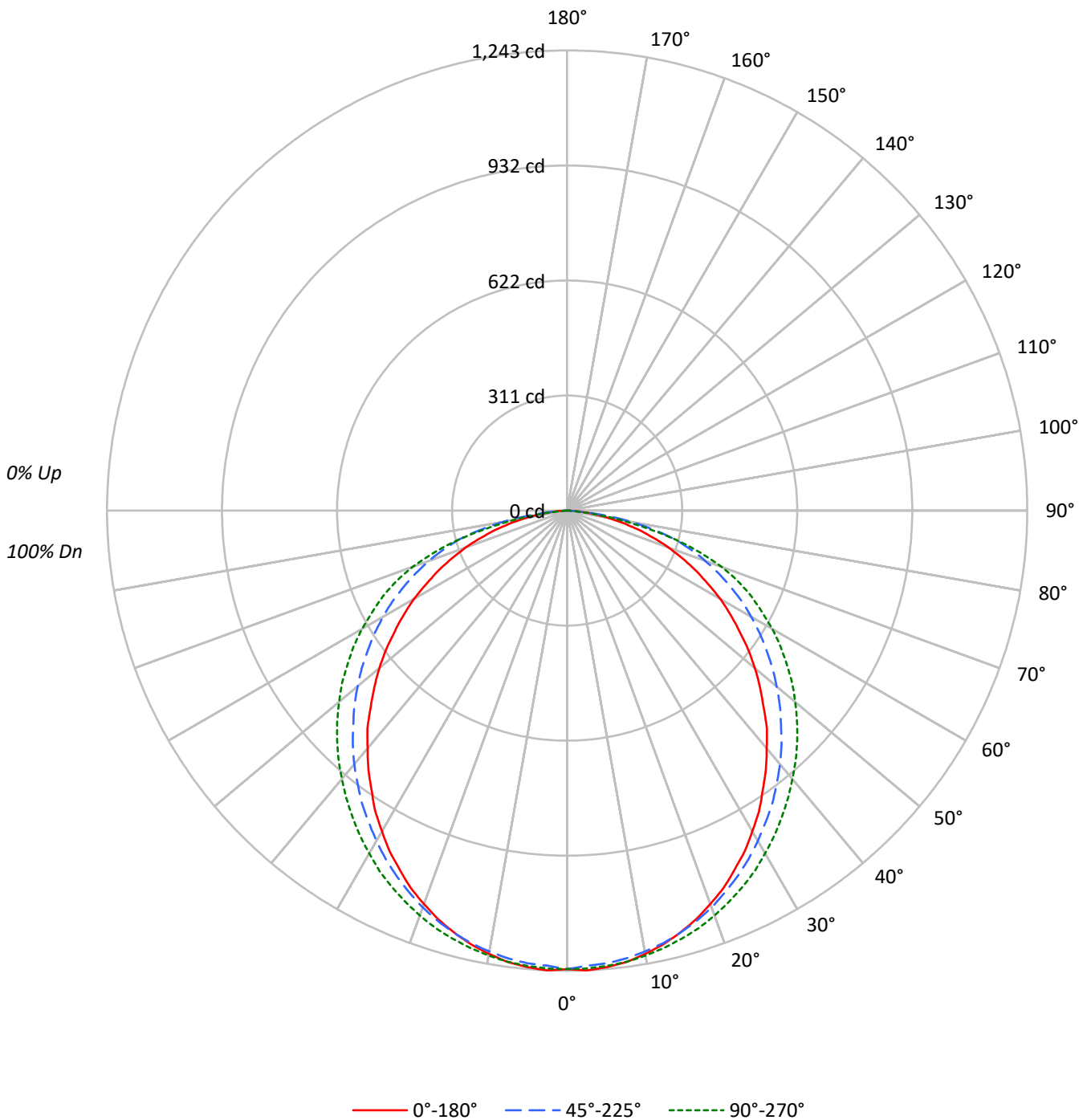
Input Watts (W): 29.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P271920

CATALOG NUMBER: 14CZ2-39HE-UNV-L950-CD1-U

Luminous Intensity Polar Plot





TEST NUMBER: P271920

CATALOG NUMBER: 14CZ2-39HE-UNV-L950-CD1-U

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	99	95	106	101	97	94	97	94	91	93	90	88	90	87	85	83
2	98	90	83	77	96	88	82	76	84	79	74	81	77	73	78	74	71	69
3	89	79	70	64	87	77	69	63	74	67	62	71	66	61	69	64	60	58
4	82	70	61	54	79	68	60	53	66	58	53	63	57	52	61	56	51	49
5	75	62	53	46	73	61	52	46	59	51	45	57	50	45	55	49	44	42
6	69	56	47	40	67	55	46	40	53	45	40	51	44	39	50	44	39	37
7	64	51	42	35	63	50	41	35	48	41	35	47	40	35	45	39	34	32
8	60	46	37	32	58	45	37	31	44	37	31	43	36	31	42	35	31	29
9	56	42	34	28	54	42	34	28	41	33	28	39	33	28	38	32	28	26
10	52	39	31	26	51	39	31	26	37	30	26	37	30	25	36	30	25	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3333	3333	3333
5°	3343	3315	3335
10°	3323	3305	3336
15°	3287	3290	3334
20°	3239	3267	3333
25°	3178	3235	3330
30°	3109	3201	3323
35°	3026	3173	3321
40°	2946	3143	3326
45°	2855	3108	3344
50°	2772	3094	3366
55°	2666	3084	3396
60°	2571	3089	3443
65°	2440	3098	3496
70°	2290	3122	3494
75°	2075	3150	3159
80°	1702	2721	2249
85°	1263	1288	519



TEST NUMBER: P271920

CATALOG NUMBER: 14CZ2-39HE-UNV-L950-CD1-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	117.2	3.3
10°-20°	334.8	9.3
20°-30°	504.3	14.0
30°-40°	605.2	16.8
40°-50°	630.8	17.5
50°-60°	583.9	16.2
60°-70°	471.8	13.1
70°-80°	287.7	8.0
80°-90°	59.4	1.7
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°	956.3	26.6
0°-40°	1561.4	43.4
0°-60°	2776.1	77.2
0°-90°	3595.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3595.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1238	1238	1238	1238	1238	
5°	1238	1234	1227	1236	1234	117
15°	1180	1181	1181	1197	1197	333
25°	1070	1077	1089	1117	1122	493
35°	921	936	966	1001	1011	577
45°	750	773	817	862	879	580
55°	568	598	657	709	724	509
65°	383	421	487	536	549	379
75°	200	244	303	308	304	210
85°	41	61	42	23	17	50
90°	0	0	0	0	0	



TEST NUMBER: P271920

CATALOG NUMBER: 14CZ2-39HE-UNV-L950-CD1-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1238.5	1238.5	1238.5	1238.5	1238.5
2.5°	1243.3	1239.3	1230.5	1239.3	1237.7
5°	1237.7	1234.5	1227.3	1236.1	1234.5
7.5°	1229.7	1226.5	1220.1	1230.5	1228.9
10°	1216.0	1214.4	1209.6	1221.7	1220.9
12.5°	1200.0	1199.2	1196.8	1210.4	1209.6
15°	1180.0	1180.8	1180.8	1196.8	1196.8
17.5°	1157.5	1159.1	1162.3	1180.0	1182.4
20°	1131.1	1134.3	1140.7	1160.7	1163.9
22.5°	1103.8	1106.2	1115.8	1139.9	1143.1
25°	1070.2	1076.6	1089.4	1116.6	1121.5
27.5°	1038.1	1043.7	1061.3	1089.4	1097.4
30°	1000.4	1009.2	1030.1	1060.5	1069.3
32.5°	964.3	974.0	998.0	1033.3	1041.3
35°	921.1	935.5	965.9	1001.2	1010.8
37.5°	881.8	895.4	929.9	968.3	979.6
40°	838.5	855.3	894.6	935.5	946.7
42.5°	798.4	814.4	856.9	898.6	913.8
45°	750.3	772.8	816.8	862.5	878.6
47.5°	706.2	728.7	779.2	828.1	842.5
50°	662.1	686.2	739.1	789.6	804.0
52.5°	616.4	642.1	699.0	749.5	766.3
55°	568.3	598.0	657.3	708.6	723.9
57.5°	522.7	553.1	616.4	668.5	683.8
60°	477.8	509.0	574.0	623.7	639.7
62.5°	428.1	464.9	532.3	581.2	593.2
65°	383.2	420.8	486.6	535.5	549.1
67.5°	335.9	376.8	442.5	487.4	500.2
70°	291.0	333.5	396.8	438.5	444.1
72.5°	242.9	286.2	350.3	376.8	376.8
75°	199.6	243.7	303.0	307.8	303.8
77.5°	152.3	201.2	239.7	230.1	220.4
80°	109.8	157.9	175.6	157.9	145.1
82.5°	73.7	114.6	105.8	84.2	74.5
85°	40.9	60.9	41.7	23.2	16.8
87.5°	15.2	13.6	4.0	4.0	4.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)