

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: P272040

Luminaire Tested: **22CZ2-39HE-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: P272040
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-23)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ2-39HE-S-UNV-L950-CD1-U
Description: 2'X2' TROFFER LED MODULE,SMOOTH 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: 3758.0 lumens
Efficiency: N/A
Efficacy: 124.0 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 1.26 / 1.34
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

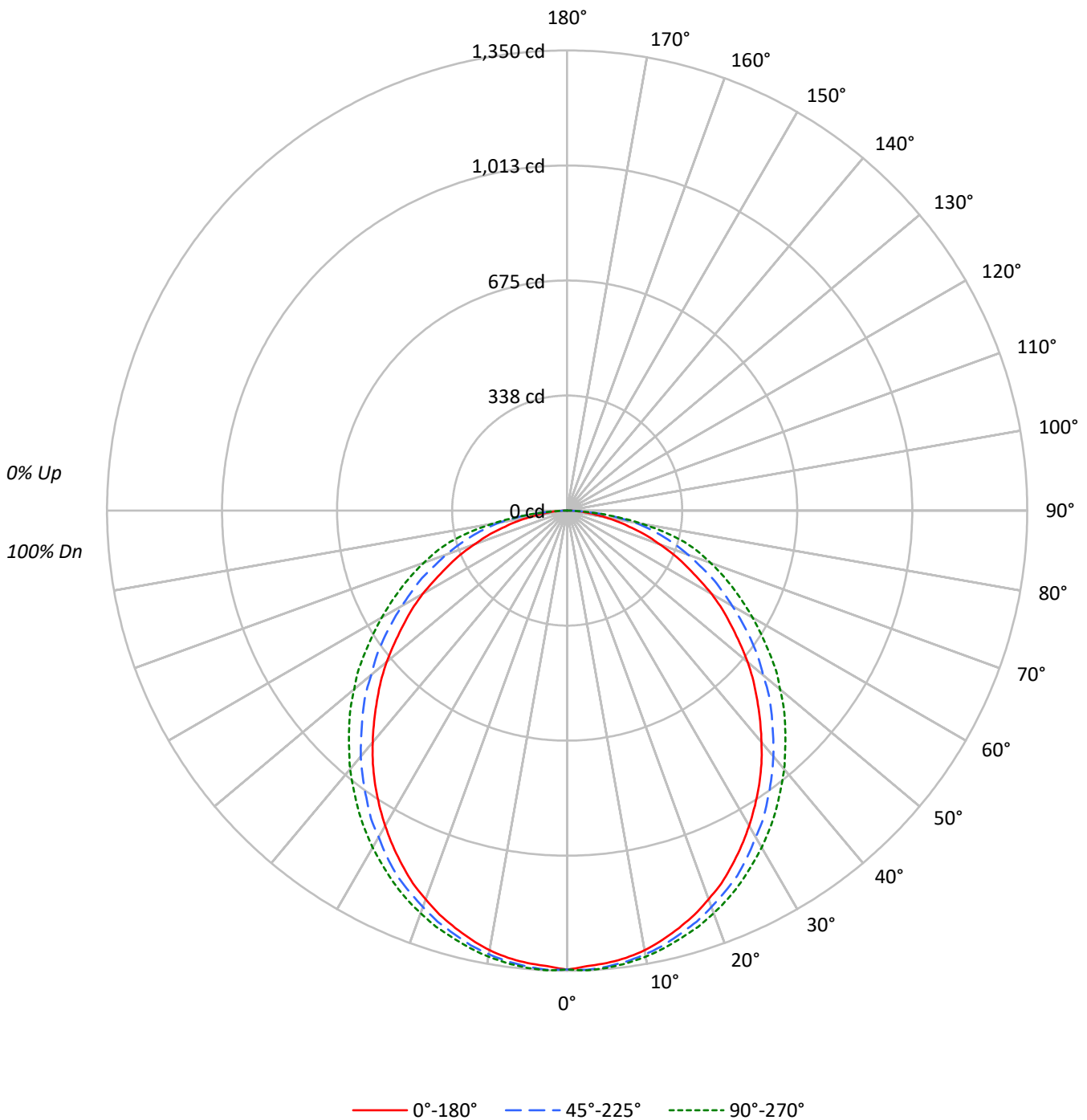
Input Watts (W): 30.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	108	103	99	95	106	101	97	94	97	94	91	93	90	88	89	87	85	83
2	98	90	83	77	96	88	82	76	84	79	74	81	77	73	78	74	71	69
3	90	79	71	64	87	77	70	63	74	68	62	72	66	61	69	64	60	58
4	82	70	61	54	80	69	60	54	66	59	53	64	57	52	61	56	52	49
5	75	62	53	47	73	61	53	46	59	52	46	57	51	45	55	50	45	43
6	70	56	47	41	68	55	47	41	53	46	40	52	45	40	50	44	39	37
7	65	51	42	36	63	50	42	36	49	41	36	47	40	35	46	40	35	33
8	60	47	38	32	59	46	38	32	45	37	32	43	37	32	42	36	31	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	51	39	31	26	38	31	26	37	31	26	36	30	26	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3624	3624	3624
5°	3600	3628	3638
10°	3579	3613	3632
15°	3532	3580	3615
20°	3475	3545	3600
25°	3405	3509	3577
30°	3318	3438	3547
35°	3226	3375	3514
40°	3117	3308	3480
45°	3003	3229	3443
50°	2892	3142	3413
55°	2756	3085	3389
60°	2633	3010	3378
65°	2456	2992	3416
70°	2263	2966	3518
75°	2042	3008	3700
80°	1767	3098	3477
85°	1460	2600	2600



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	127.3	3.4
10°-20°	362.4	9.6
20°-30°	542.3	14.4
30°-40°	642.2	17.1
40°-50°	654.4	17.4
50°-60°	586.6	15.6
60°-70°	459.2	12.2
70°-80°	296.1	7.9
80°-90°	87.5	2.3
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°	1032.0	27.5
0°-40°	1674.2	44.5
0°-60°	2915.2	77.6
0°-90°	3758.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3758.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1347	1347	1347	1347	1347	
5°	1333	1336	1343	1345	1347	127
15°	1268	1275	1285	1296	1298	357
25°	1147	1157	1182	1198	1205	528
35°	982	994	1028	1059	1070	614
45°	789	807	849	892	905	609
55°	587	607	658	703	722	527
65°	386	408	470	516	536	383
75°	196	226	289	338	356	211
85°	47	65	84	84	84	56
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1346.6	1346.6	1346.6	1346.6	1346.6
2.5°	1337.8	1341.3	1348.4	1350.1	1350.1
5°	1332.6	1336.1	1343.1	1344.9	1346.6
7.5°	1323.8	1325.6	1334.3	1337.8	1339.6
10°	1309.8	1313.3	1322.1	1327.3	1329.1
12.5°	1290.5	1295.8	1306.3	1313.3	1315.0
15°	1267.7	1274.7	1285.2	1295.8	1297.5
17.5°	1243.2	1250.2	1264.2	1276.5	1280.0
20°	1213.4	1222.1	1237.9	1251.9	1257.2
22.5°	1183.5	1190.6	1209.8	1227.4	1232.6
25°	1146.7	1157.2	1181.8	1197.6	1204.6
27.5°	1108.1	1120.4	1145.0	1166.0	1173.0
30°	1067.8	1080.1	1106.4	1132.7	1141.5
32.5°	1025.7	1039.8	1071.3	1097.6	1106.4
35°	981.9	994.2	1027.5	1059.1	1069.6
37.5°	936.3	946.8	985.4	1018.7	1029.2
40°	887.2	901.2	941.6	980.1	990.7
42.5°	838.1	853.9	894.2	936.3	946.8
45°	789.0	806.6	848.6	892.5	904.8
47.5°	741.7	755.7	803.1	845.1	862.7
50°	690.8	704.9	750.5	797.8	815.3
52.5°	638.2	657.5	706.6	752.2	773.2
55°	587.4	606.7	657.5	703.1	722.4
57.5°	540.0	555.8	608.4	655.8	675.1
60°	489.2	503.2	559.3	610.2	627.7
62.5°	434.8	455.9	513.7	561.1	582.1
65°	385.7	408.5	469.9	515.5	536.5
67.5°	340.2	361.2	420.8	469.9	492.7
70°	287.6	315.6	377.0	426.1	447.1
72.5°	245.5	270.0	333.1	382.2	405.0
75°	196.4	226.2	289.3	338.4	355.9
77.5°	156.1	185.9	245.5	284.1	292.8
80°	114.0	143.8	199.9	219.2	224.4
82.5°	77.1	105.2	143.8	149.0	150.8
85°	47.3	64.9	84.2	84.2	84.2
87.5°	22.8	26.3	29.8	28.1	28.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)