

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: P272044

Luminaire Tested: **22CZ2-39-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: P272044
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: 22CZ2-39-S-UNV-L950-CD1-U
Description: 2'X2' TROFFER LED MODULE,SMOOTH LENS, 90CRI
Light Source: (98) 5000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER
Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3770.0 lumens
Efficiency: N/A
Efficacy: 109.3 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

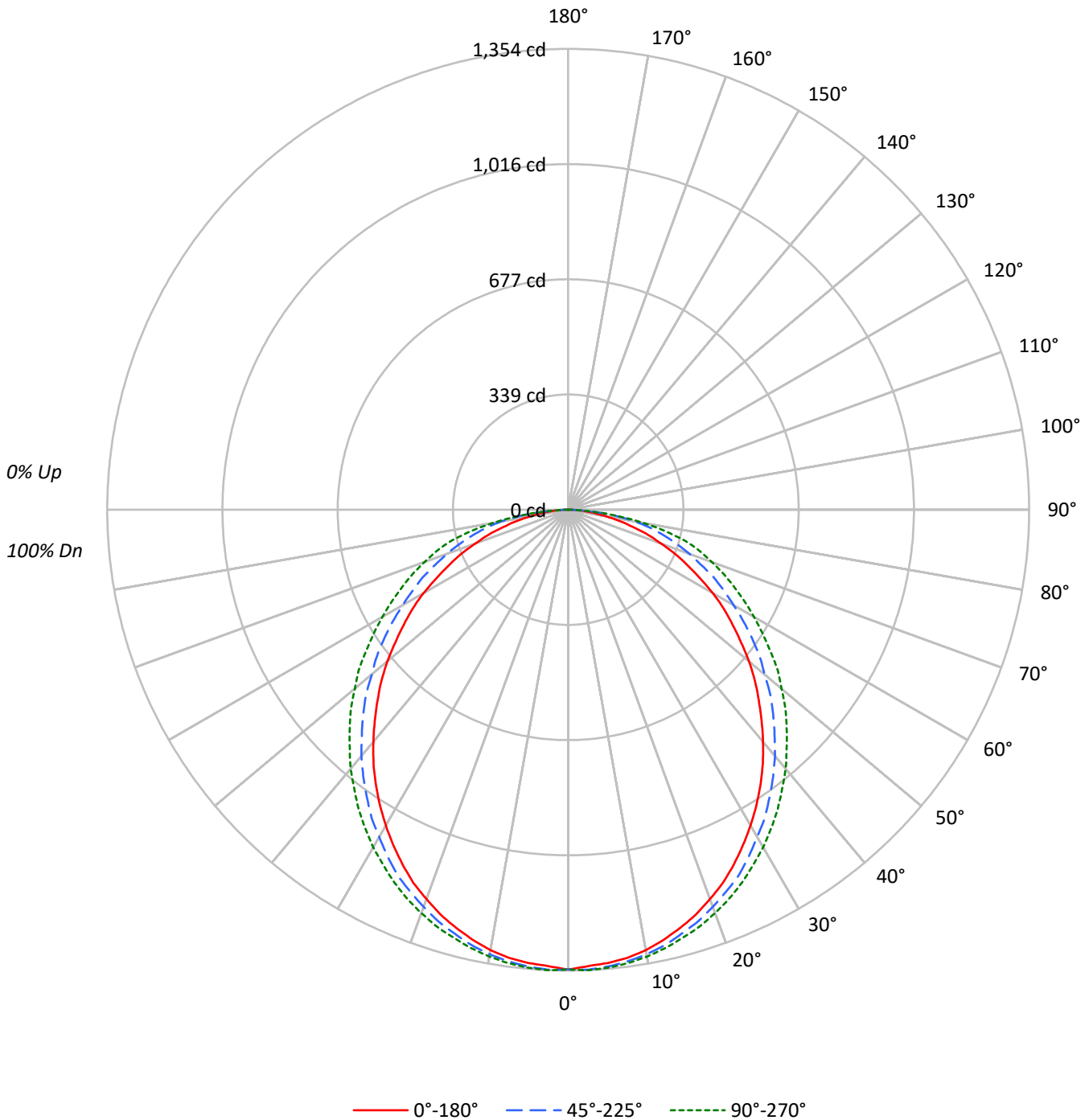
Input Watts (W): 34.5
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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					100			
1	108	103	99	95	106	101	97	94	97	94	91	93	90	88	89	87	85	83					83			
2	98	90	83	77	96	88	82	76	84	79	74	81	77	73	78	74	71	69					69			
3	90	79	71	64	87	77	70	63	74	68	62	72	66	61	69	64	60	58					58			
4	82	70	61	54	80	69	60	54	66	59	53	64	57	52	61	56	52	49					49			
5	75	62	53	47	73	61	53	46	59	52	46	57	51	45	55	50	45	43					43			
6	70	56	47	41	68	55	47	41	53	46	40	52	45	40	50	44	39	37					37			
7	65	51	42	36	63	50	42	36	49	41	36	47	40	35	46	40	35	33					33			
8	60	47	38	32	59	46	38	32	45	37	32	43	37	32	42	36	31	30					30			
9	56	43	35	29	55	42	34	29	41	34	29	40	33	29	39	33	28	27					27			
10	53	40	32	26	51	39	31	26	38	31	26	37	31	26	36	30	26	24					24			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3635	3635	3635
5°	3611	3640	3649
10°	3590	3624	3643
15°	3543	3592	3626
20°	3486	3556	3612
25°	3416	3520	3588
30°	3329	3449	3558
35°	3236	3386	3525
40°	3127	3318	3491
45°	3012	3240	3454
50°	2901	3152	3424
55°	2765	3095	3400
60°	2641	3020	3389
65°	2464	3002	3428
70°	2270	2976	3529
75°	2048	3017	3713
80°	1771	3107	3490
85°	1467	2606	2606



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	127.8	3.4
10°-20°	363.6	9.6
20°-30°	544.0	14.4
30°-40°	644.2	17.1
40°-50°	656.5	17.4
50°-60°	588.4	15.6
60°-70°	460.7	12.2
70°-80°	297.1	7.9
80°-90°	87.7	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°	1035.3	27.5
0°-40°	1679.5	44.5
0°-60°	2924.5	77.6
0°-90°	3770.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3770.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1351	1351	1351	1351	1351	
5°	1337	1340	1347	1349	1351	127
15°	1272	1279	1289	1300	1302	359
25°	1150	1161	1186	1201	1208	530
35°	985	997	1031	1062	1073	616
45°	792	809	851	895	908	611
55°	589	609	660	705	725	528
65°	387	410	471	517	538	384
75°	197	227	290	340	357	211
85°	48	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°	1350.9	1350.9	1350.9	1350.9	1350.9
2.5°	1342.1	1345.6	1352.7	1354.4	1354.4
5°	1336.8	1340.4	1347.4	1349.1	1350.9
7.5°	1328.0	1329.8	1338.6	1342.1	1343.9
10°	1314.0	1317.5	1326.3	1331.6	1333.3
12.5°	1294.6	1299.9	1310.5	1317.5	1319.2
15°	1271.8	1278.8	1289.3	1299.9	1301.7
17.5°	1247.1	1254.2	1268.2	1280.5	1284.1
20°	1217.2	1226.0	1241.9	1255.9	1261.2
22.5°	1187.3	1194.4	1213.7	1231.3	1236.6
25°	1150.4	1160.9	1185.6	1201.4	1208.4
27.5°	1111.7	1124.0	1148.6	1169.7	1176.8
30°	1071.2	1083.5	1109.9	1136.3	1145.1
32.5°	1029.0	1043.1	1074.7	1101.1	1109.9
35°	985.0	997.4	1030.8	1062.4	1073.0
37.5°	939.3	949.9	988.6	1022.0	1032.5
40°	890.1	904.1	944.6	983.3	993.8
42.5°	840.8	856.6	897.1	939.3	949.9
45°	791.5	809.1	851.4	895.3	907.6
47.5°	744.1	758.1	805.6	847.8	865.4
50°	693.0	707.1	752.9	800.3	817.9
52.5°	640.3	659.6	708.9	754.6	775.7
55°	589.3	608.6	659.6	705.4	724.7
57.5°	541.8	557.6	610.4	657.9	677.2
60°	490.8	504.8	561.1	612.1	629.7
62.5°	436.2	457.3	515.4	562.9	584.0
65°	387.0	409.8	471.4	517.1	538.3
67.5°	341.2	362.4	422.2	471.4	494.3
70°	288.5	316.6	378.2	427.4	448.5
72.5°	246.3	270.9	334.2	383.5	406.3
75°	197.0	226.9	290.2	339.5	357.1
77.5°	156.6	186.5	246.3	285.0	293.8
80°	114.3	144.2	200.5	219.9	225.2
82.5°	77.4	105.5	144.2	149.5	151.3
85°	47.5	65.1	84.4	84.4	84.4
87.5°	22.9	26.4	29.9	28.1	28.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)