

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: P294854

Luminaire Tested: **22CZ2-39HE-HRP-UNV-L950-CD1-U**

Issue Date: 12/2/2019

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: P294854
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1808-918-22)
Test Lab: INNOVATIONS CENTER(G3)
Issue Date: 12/2/2019
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ2-39HE-HRP-UNV-L950-CD1-U
Description: 2'X2' TROFFER LED MODULE, HIGH EFFICIENCY ROUND PERF. LENS
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: 2869.0 lumens
Efficiency: N/A
Efficacy: 94.7 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.29 / 1.38
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

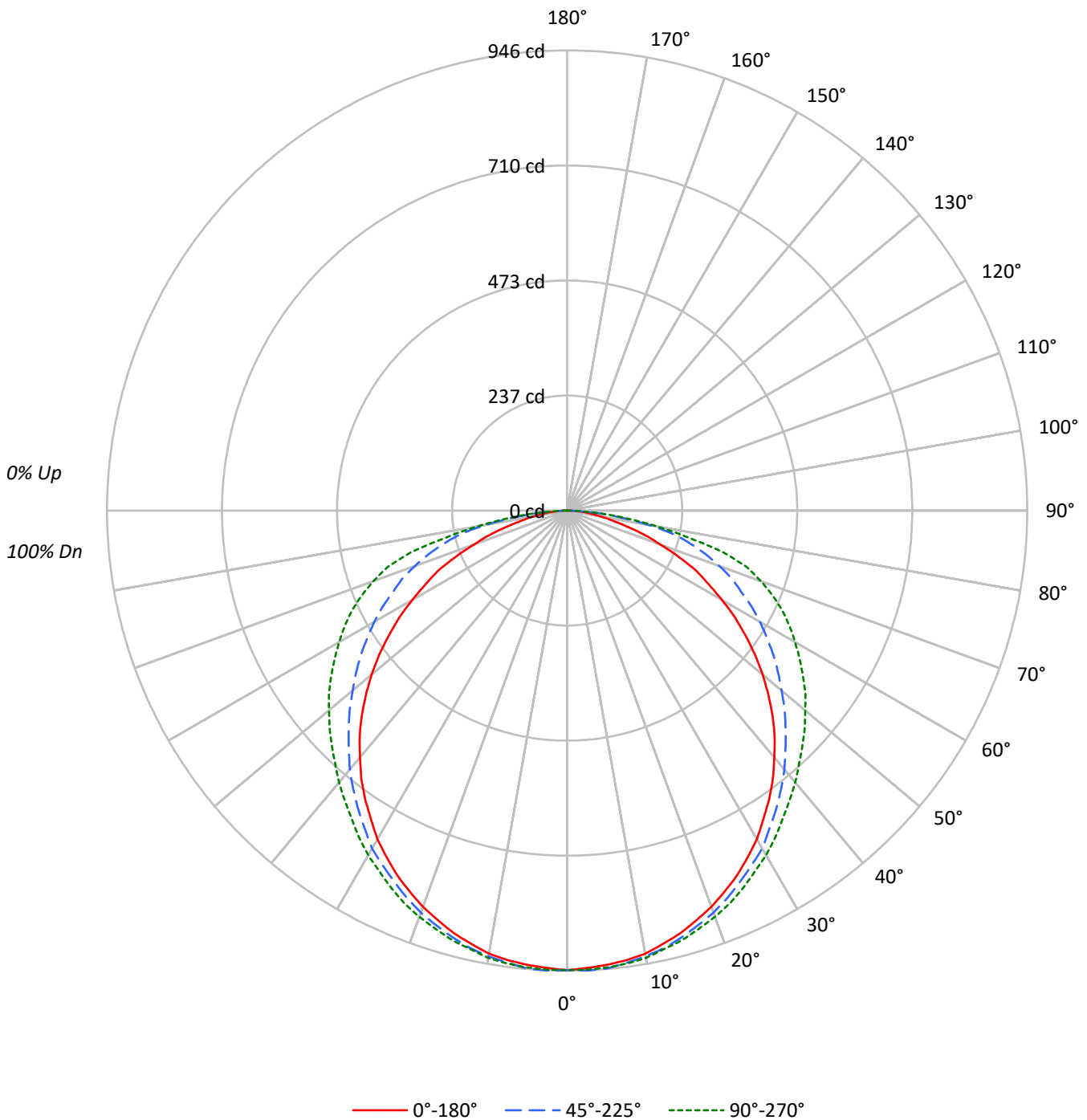
Input Watts (W): 30.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	98	94	105	101	96	93	96	93	90		92	90	87		89	87	84	82
2	98	89	82	76	95	87	80	75	84	78	73		80	75	71		77	73	70	68
3	89	78	69	62	86	76	68	62	73	66	61		70	64	60		68	63	59	56
4	81	69	59	52	79	67	59	52	65	57	51		62	56	51		60	55	50	48
5	74	61	52	45	72	60	51	45	58	50	44		56	49	44		54	48	43	41
6	69	55	46	39	67	54	45	39	52	44	39		50	43	38		49	43	38	36
7	64	50	41	34	62	49	40	34	47	40	34		46	39	34		44	38	33	31
8	59	45	37	31	58	45	36	31	43	36	30		42	35	30		41	35	30	28
9	55	42	33	28	54	41	33	27	40	32	27		39	32	27		38	31	27	25
10	52	38	30	25	50	38	30	25	37	30	25		36	29	25		35	29	24	23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2542	2542	2542
5°	2532	2552	2547
10°	2527	2542	2552
15°	2506	2531	2546
20°	2483	2519	2545
25°	2456	2499	2542
30°	2424	2491	2542
35°	2378	2462	2539
40°	2327	2441	2562
45°	2273	2417	2603
50°	2197	2409	2675
55°	2097	2428	2776
60°	1977	2464	2912
65°	1867	2512	3112
70°	1595	2620	3332
75°	1336	2728	3462
80°	1094	2636	2889
85°	951	1954	2124



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	89.5	3.1
10°-20°	256.1	8.9
20°-30°	388.2	13.5
30°-40°	468.7	16.3
40°-50°	492.5	17.2
50°-60°	463.4	16.2
60°-70°	386.4	13.5
70°-80°	256.0	8.9
80°-90°	68.2	2.4
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°	733.8	25.6
0°-40°	1202.5	41.9
0°-60°	2158.4	75.2
0°-90°	2869.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2869.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	945	945	945	945	945	
5°	938	939	945	945	943	89
15°	900	903	908	912	914	254
25°	827	832	842	852	856	381
35°	724	731	749	766	773	453
45°	597	606	635	668	684	460
55°	447	467	518	570	592	400
65°	293	318	394	460	489	285
75°	128	179	262	317	333	139
85°	31	47	63	69	69	36
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	944.7	944.7	944.7	944.7	944.7
2.5°	941.1	942.9	946.5	946.5	944.7
5°	937.5	939.3	944.7	944.7	942.9
7.5°	932.1	933.9	937.5	941.1	939.3
10°	924.8	926.6	930.3	933.9	933.9
12.5°	912.2	914.0	921.2	923.0	923.0
15°	899.5	903.1	908.5	912.2	914.0
17.5°	883.2	886.8	894.1	901.3	901.3
20°	866.9	870.5	879.6	886.8	888.6
22.5°	847.0	852.4	861.5	870.5	874.1
25°	827.1	832.5	841.6	852.4	856.0
27.5°	803.6	809.0	821.7	834.3	836.1
30°	780.0	785.5	801.8	812.6	818.0
32.5°	751.1	758.3	774.6	790.9	796.3
35°	723.9	731.2	749.3	765.6	772.8
37.5°	695.0	702.2	722.1	742.0	751.1
40°	662.4	671.4	695.0	716.7	729.4
42.5°	631.6	640.7	664.2	693.2	705.8
45°	597.2	606.3	635.2	667.8	684.1
47.5°	561.0	571.9	606.3	646.1	662.4
50°	524.8	537.5	575.5	620.8	638.9
52.5°	486.8	503.1	546.6	595.4	617.2
55°	447.0	466.9	517.6	570.1	591.8
57.5°	409.0	427.1	486.8	542.9	566.5
60°	367.4	390.9	457.9	515.8	541.1
62.5°	327.6	352.9	427.1	488.7	515.8
65°	293.2	318.5	394.5	459.7	488.7
67.5°	247.9	282.3	367.4	428.9	457.9
70°	202.7	249.8	333.0	396.4	423.5
72.5°	168.3	213.6	298.6	362.0	387.3
75°	128.5	179.2	262.4	316.7	333.0
77.5°	95.9	148.4	224.4	251.6	253.4
80°	70.6	114.0	170.1	179.2	186.4
82.5°	48.9	79.6	110.4	121.3	124.9
85°	30.8	47.1	63.3	68.8	68.8
87.5°	16.3	18.1	21.7	21.7	21.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)