

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: P295022

Luminaire Tested: **24CZ2-35HE-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: P295022
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1808-918-20)
Test Lab: INNOVATIONS CENTER(G3)
Issue Date: 12/2/2019
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ2-35HE-HRP-UNV-L950-CD1-U
Description: 2'x4' TROFFER LED MODULE, HIGH EFFICIENCY ROUND PERF. LENS
Light Source: (168) 5000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER
Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2523.6 lumens
Efficiency: N/A
Efficacy: 93.8 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.3 / 1.4
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

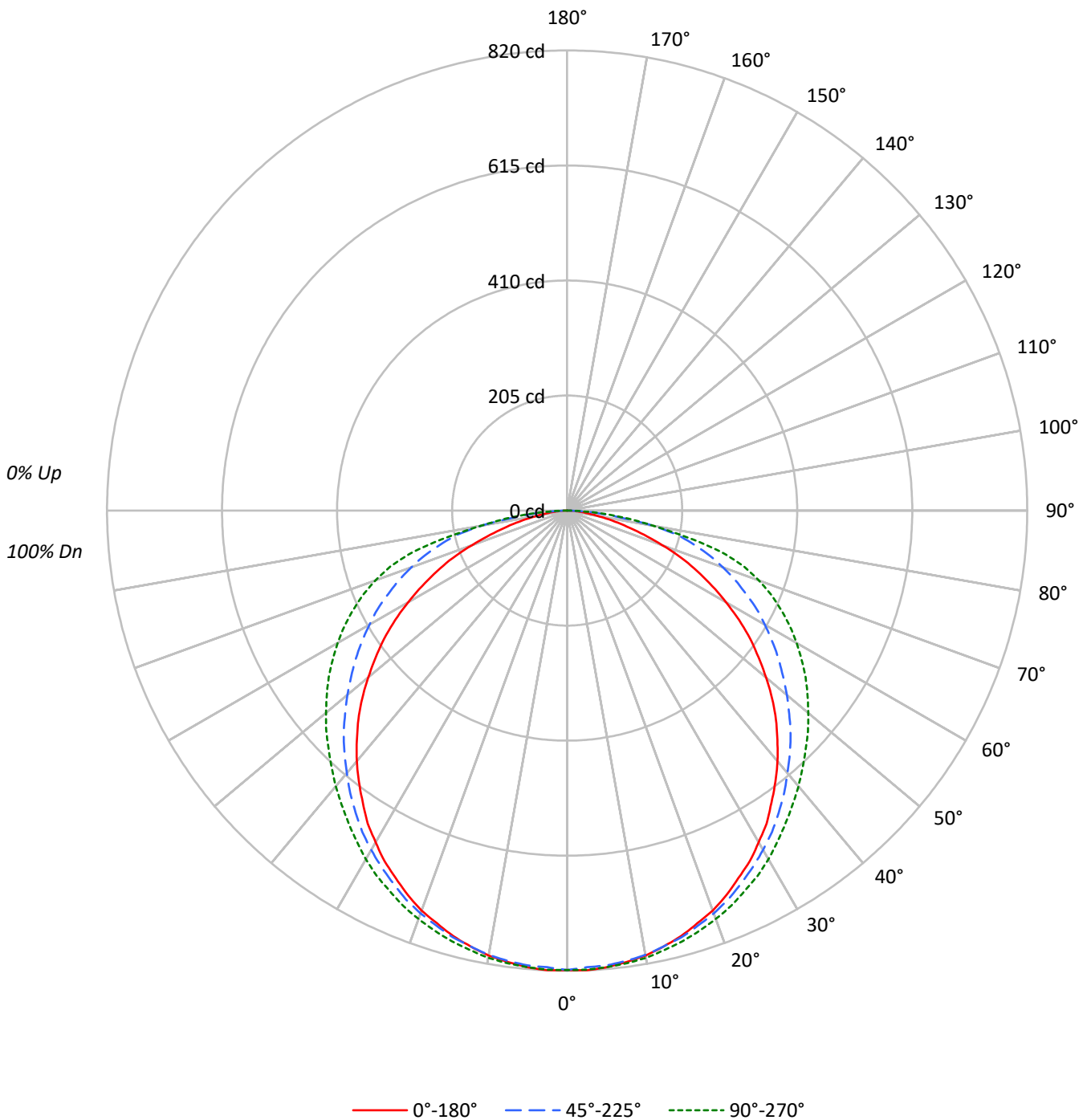
Input Watts (W): 26.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	86	84	82
2	98	89	82	76	95	87	80	75	83	78	73		80	75	71		77	73	70	67
3	89	78	69	62	86	76	68	62	73	66	61		70	64	59		68	63	58	56
4	81	68	59	52	79	67	59	52	65	57	51		62	56	50		60	54	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	38		50	43	38		49	42	38	36
7	63	50	41	34	62	49	40	34	47	39	34		46	39	34		44	38	33	31
8	59	45	36	30	57	44	36	30	43	36	30		42	35	30		41	34	30	28
9	55	41	33	27	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	24		35	29	24	23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1102	1102	1102
5°	1103	1099	1103
10°	1100	1098	1106
15°	1093	1096	1107
20°	1086	1094	1109
25°	1073	1088	1110
30°	1060	1085	1115
35°	1043	1079	1116
40°	1024	1072	1126
45°	1001	1071	1144
50°	969	1070	1174
55°	934	1078	1217
60°	881	1094	1271
65°	814	1120	1342
70°	711	1160	1430
75°	577	1219	1477
80°	425	1195	1195
85°	326	881	994



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	77.6	3.1
10°-20°	222.7	8.8
20°-30°	339.1	13.4
30°-40°	411.7	16.3
40°-50°	435.0	17.2
50°-60°	410.5	16.3
60°-70°	341.3	13.5
70°-80°	224.5	8.9
80°-90°	61.2	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°	639.4	25.3
0°-40°	1051.1	41.7
0°-60°	1896.5	75.2
0°-90°	2523.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2523.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	819	819	819	819	819	
5°	817	817	814	817	817	78
15°	785	786	787	794	794	221
25°	723	727	733	746	748	333
35°	635	642	657	674	679	397
45°	526	537	563	591	601	405
55°	398	415	460	503	519	355
65°	256	285	352	404	422	253
75°	111	162	234	278	284	120
85°	21	46	57	63	64	26
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	818.8	818.8	818.8	818.8	818.8
2.5°	819.8	818.8	814.5	818.8	818.8
5°	816.7	816.7	813.5	816.7	816.7
7.5°	811.4	811.4	809.3	813.5	813.5
10°	805.0	805.0	804.0	809.3	809.3
12.5°	795.5	796.6	795.5	801.9	801.9
15°	785.0	786.0	787.1	794.5	794.5
17.5°	771.2	773.3	775.5	783.9	785.0
20°	758.6	759.6	763.8	773.3	774.4
22.5°	741.7	744.8	750.1	759.6	762.8
25°	722.6	726.9	733.2	745.9	748.0
27.5°	704.7	707.8	716.3	730.0	734.3
30°	682.5	687.8	698.3	712.1	717.4
32.5°	661.4	666.6	679.3	694.1	698.3
35°	634.9	642.3	657.1	674.0	679.3
37.5°	609.6	617.0	634.9	654.0	660.3
40°	583.2	591.6	610.6	632.8	641.3
42.5°	554.7	566.3	587.4	611.7	621.2
45°	526.1	536.7	563.1	590.6	601.1
47.5°	495.5	508.2	536.7	569.4	582.1
50°	462.7	478.6	511.3	547.3	561.0
52.5°	430.0	447.9	484.9	525.1	539.9
55°	398.3	415.2	459.6	502.9	518.7
57.5°	363.4	384.6	433.2	479.6	495.5
60°	327.5	350.8	406.7	455.3	472.2
62.5°	291.6	318.0	381.4	430.0	447.9
65°	255.7	285.3	351.8	403.6	421.5
67.5°	220.8	253.6	324.3	376.1	394.1
70°	180.7	221.9	294.8	345.5	363.4
72.5°	143.7	191.2	266.2	313.8	329.6
75°	110.9	161.6	234.5	277.9	284.2
77.5°	81.3	132.1	201.8	216.6	217.6
80°	54.9	105.6	154.2	152.1	154.2
82.5°	35.9	79.2	97.2	108.8	109.9
85°	21.1	46.5	57.1	63.4	64.4
87.5°	10.6	15.8	20.1	21.1	23.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)