

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: P274784

Luminaire Tested: **24CZ2-35HE-RDP-UNV-L935-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: P274784
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1808-918-19)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ2-35HE-RDP-UNV-L935-CD1-U
Description: 2'x4' TROFFER LED MODULE,SMOOTH LENS WITH INSERT, 90CRI
Light Source: (168) 3500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER
Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2037.0 lumens
Efficiency: N/A
Efficacy: 75.7 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.3 / 1.41
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

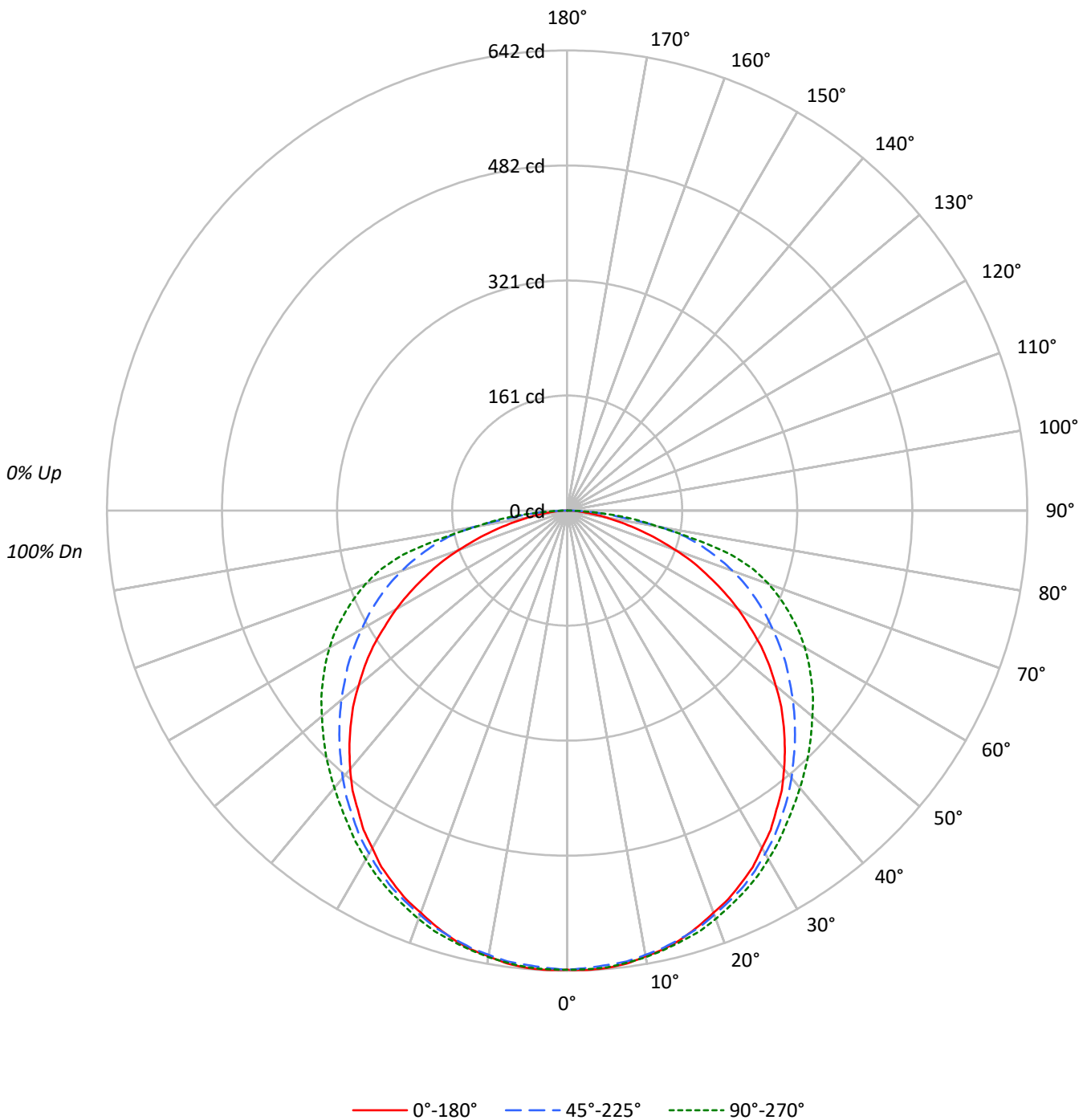
Input Watts (W): 26.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	100	96	92	96	93	89	92	89	87	88	86	84	82
2	97	89	81	75	95	87	80	74	83	77	72	80	75	71	77	73	69	67
3	88	77	68	62	86	76	67	61	72	66	60	70	64	59	67	62	58	56
4	81	68	59	52	78	67	58	51	64	57	51	62	55	50	59	54	49	47
5	74	60	51	44	72	59	51	44	57	49	43	55	48	43	53	47	42	40
6	68	54	45	38	66	53	45	38	51	44	38	50	43	37	48	42	37	35
7	63	49	40	34	61	48	40	34	47	39	33	45	38	33	44	38	33	31
8	59	45	36	30	57	44	36	30	43	35	30	41	34	29	40	34	29	27
9	55	41	33	27	53	40	32	27	39	32	27	38	31	26	37	31	26	24
10	51	38	30	24	50	37	29	24	36	29	24	35	29	24	34	28	24	22

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	862	862	862
5°	865	860	864
10°	863	860	864
15°	861	860	866
20°	855	859	868
25°	852	861	870
30°	845	859	873
35°	836	856	876
40°	827	855	887
45°	813	856	907
50°	795	861	935
55°	775	875	977
60°	742	892	1030
65°	695	923	1094
70°	632	966	1177
75°	536	1019	1229
80°	423	1026	994
85°	312	780	874



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	60.8	3.0
10°-20°	174.9	8.6
20°-30°	267.4	13.1
30°-40°	326.9	16.0
40°-50°	348.4	17.1
50°-60°	333.2	16.4
60°-70°	282.2	13.9
70°-80°	189.7	9.3
80°-90°	53.5	2.6
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°	503.1	24.7
0°-40°	830.0	40.7
0°-60°	1511.6	74.2
0°-90°	2037.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2037.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	641	641	641	641	641	
5°	641	640	636	640	640	61
15°	618	618	617	622	621	174
25°	574	576	580	585	586	265
35°	509	513	521	532	534	319
45°	427	434	450	469	477	330
55°	330	342	373	402	416	294
65°	218	240	290	328	344	217
75°	103	140	196	229	236	110
85°	20	41	50	55	57	25
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	640.6	640.6	640.6	640.6	640.6
2.5°	641.6	641.6	638.6	640.6	640.6
5°	640.6	639.6	636.5	639.6	639.6
7.5°	637.5	636.5	634.5	637.5	636.5
10°	631.5	631.5	629.5	632.5	632.5
12.5°	626.4	625.4	624.4	628.5	627.4
15°	618.4	618.4	617.3	622.4	621.4
17.5°	608.2	609.3	610.3	614.3	615.3
20°	597.1	599.2	600.2	606.2	606.2
22.5°	587.0	588.0	590.1	596.1	596.1
25°	573.9	575.9	580.0	585.0	586.0
27.5°	560.8	561.8	566.8	573.9	574.9
30°	543.6	546.6	552.7	560.8	561.8
32.5°	528.4	531.5	538.5	546.6	548.6
35°	509.2	513.3	521.4	531.5	533.5
37.5°	492.1	495.1	505.2	516.3	519.3
40°	470.8	476.9	487.0	500.1	505.2
42.5°	449.6	455.7	467.8	485.0	491.0
45°	427.4	434.5	449.6	468.8	476.9
47.5°	405.2	413.2	430.4	452.6	461.7
50°	379.9	390.0	411.2	436.5	446.6
52.5°	355.7	367.8	391.0	419.3	432.4
55°	330.4	342.5	372.8	402.1	416.3
57.5°	302.1	318.3	351.6	385.0	400.1
60°	275.8	291.0	331.4	367.8	382.9
62.5°	247.5	267.7	311.2	349.6	364.7
65°	218.2	240.5	290.0	328.4	343.5
67.5°	192.0	216.2	268.8	307.2	322.3
70°	160.6	191.0	245.5	283.9	299.1
72.5°	131.3	164.7	221.3	258.7	272.8
75°	103.1	140.4	196.0	229.4	236.4
77.5°	76.8	116.2	169.7	183.9	178.8
80°	54.6	93.0	132.4	125.3	128.3
82.5°	35.4	70.7	81.8	93.0	96.0
85°	20.2	41.4	50.5	54.6	56.6
87.5°	9.1	15.2	20.2	20.2	19.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)