

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: P274786

Luminaire Tested: **24CZ2-35HE-RDP-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: P274786
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-L950-CD1-U
Description: 2'x4' TROFFER LED MODULE,SMOOTH LENS WITH INSERT, 90CRI
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: 2185.0 lumens
Efficiency: N/A
Efficacy: 81.2 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

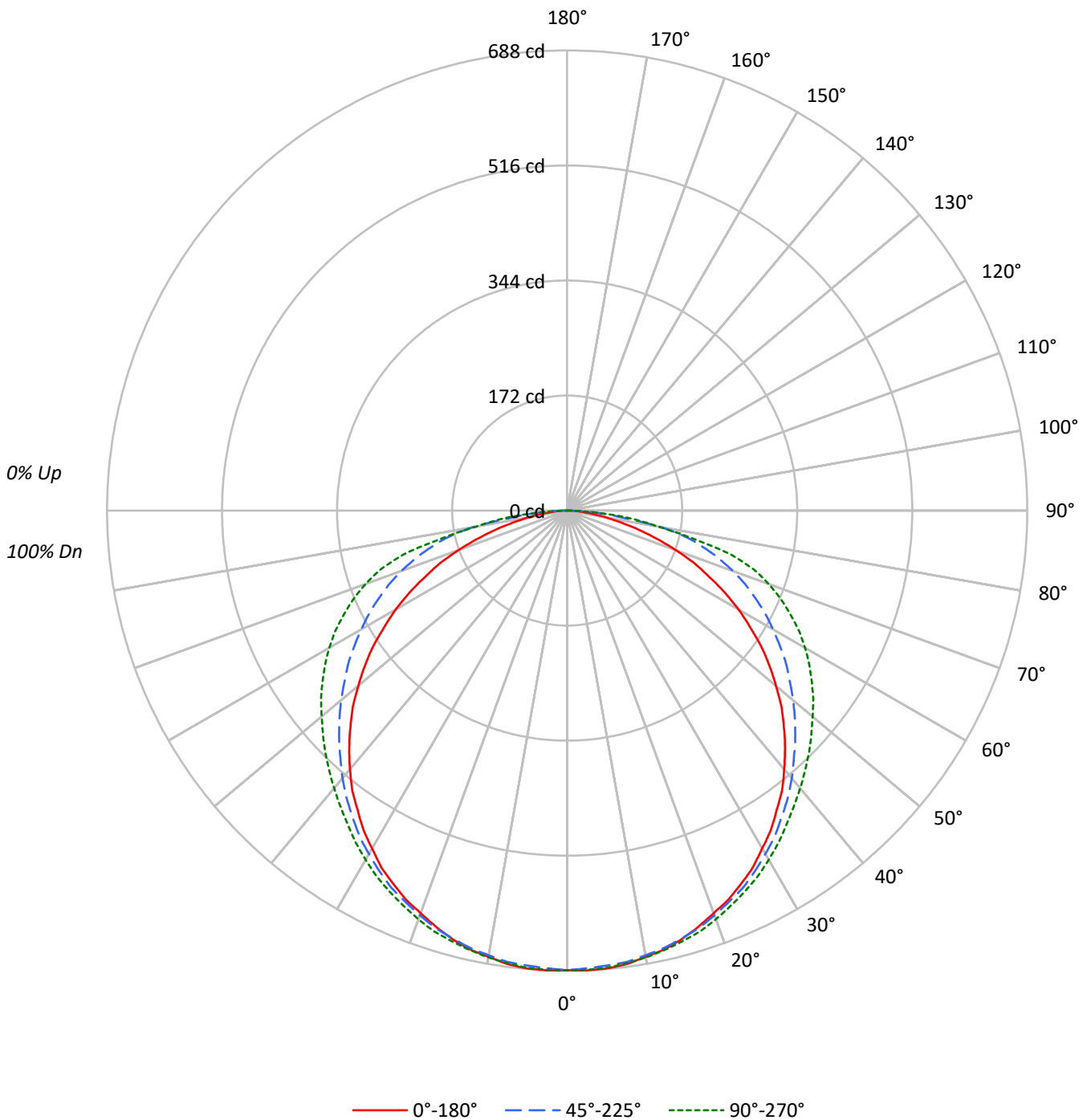
Input Watts (W): 26.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	924	924	924
5°	928	922	927
10°	925	922	927
15°	924	922	928
20°	917	922	931
25°	914	924	933
30°	906	921	936
35°	897	919	940
40°	887	918	952
45°	872	918	973
50°	853	923	1003
55°	831	938	1047
60°	796	957	1105
65°	745	990	1173
70°	678	1036	1262
75°	574	1093	1318
80°	453	1100	1066
85°	335	837	937



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	65.2	3.0
10°-20°	187.6	8.6
20°-30°	286.9	13.1
30°-40°	350.7	16.0
40°-50°	373.8	17.1
50°-60°	357.4	16.4
60°-70°	302.7	13.9
70°-80°	203.4	9.3
80°-90°	57.4	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°	539.6	24.7
0°-40°	890.3	40.7
0°-60°	1621.4	74.2
0°-90°	2185.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2185.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	687	687	687	687	687	
5°	687	686	683	686	686	65
15°	663	663	662	668	666	187
25°	616	618	622	628	629	284
35°	546	551	559	570	572	342
45°	458	466	482	503	512	354
55°	354	367	400	431	446	316
65°	234	258	311	352	368	232
75°	110	151	210	246	254	118
85°	22	44	54	58	61	27
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	687.1	687.1	687.1	687.1	687.1
2.5°	688.2	688.2	685.0	687.1	687.1
5°	687.1	686.0	682.8	686.0	686.0
7.5°	683.9	682.8	680.6	683.9	682.8
10°	677.4	677.4	675.2	678.4	678.4
12.5°	671.9	670.9	669.8	674.1	673.0
15°	663.3	663.3	662.2	667.6	666.5
17.5°	652.4	653.5	654.6	658.9	660.0
20°	640.5	642.7	643.8	650.3	650.3
22.5°	629.7	630.8	632.9	639.4	639.4
25°	615.6	617.8	622.1	627.5	628.6
27.5°	601.5	602.6	608.0	615.6	616.7
30°	583.1	586.3	592.8	601.5	602.6
32.5°	566.8	570.1	577.7	586.3	588.5
35°	546.2	550.6	559.2	570.1	572.2
37.5°	527.8	531.1	541.9	553.8	557.1
40°	505.0	511.5	522.4	536.5	541.9
42.5°	482.3	488.8	501.8	520.2	526.7
45°	458.4	466.0	482.3	502.9	511.5
47.5°	434.6	443.3	461.7	485.5	495.3
50°	407.5	418.3	441.1	468.2	479.0
52.5°	381.5	394.5	419.4	449.8	463.9
55°	354.4	367.4	399.9	431.3	446.5
57.5°	324.1	341.4	377.2	412.9	429.2
60°	295.9	312.1	355.5	394.5	410.8
62.5°	265.5	287.2	333.8	375.0	391.2
65°	234.1	257.9	311.0	352.2	368.5
67.5°	205.9	231.9	288.3	329.5	345.7
70°	172.3	204.8	263.4	304.5	320.8
72.5°	140.9	176.7	237.3	277.4	292.6
75°	110.5	150.6	210.3	246.0	253.6
77.5°	82.4	124.6	182.1	197.2	191.8
80°	58.5	99.7	142.0	134.4	137.6
82.5°	37.9	75.9	87.8	99.7	103.0
85°	21.7	44.4	54.2	58.5	60.7
87.5°	9.8	16.3	21.7	21.7	20.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)