

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: P274757

Luminaire Tested: **22CZ2-34HE-RDP-UNV-L940-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: P274757
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-24)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ2-34HE-RDP-UNV-L940-CD1-U
Description: 2'X2' TROFFER LED MODULE,SMOOTH LENS WITH INSERT, 90CRI
Light Source: (196) 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER
Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1936.0 lumens
Efficiency: N/A
Efficacy: 75.0 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.3 / 1.41
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

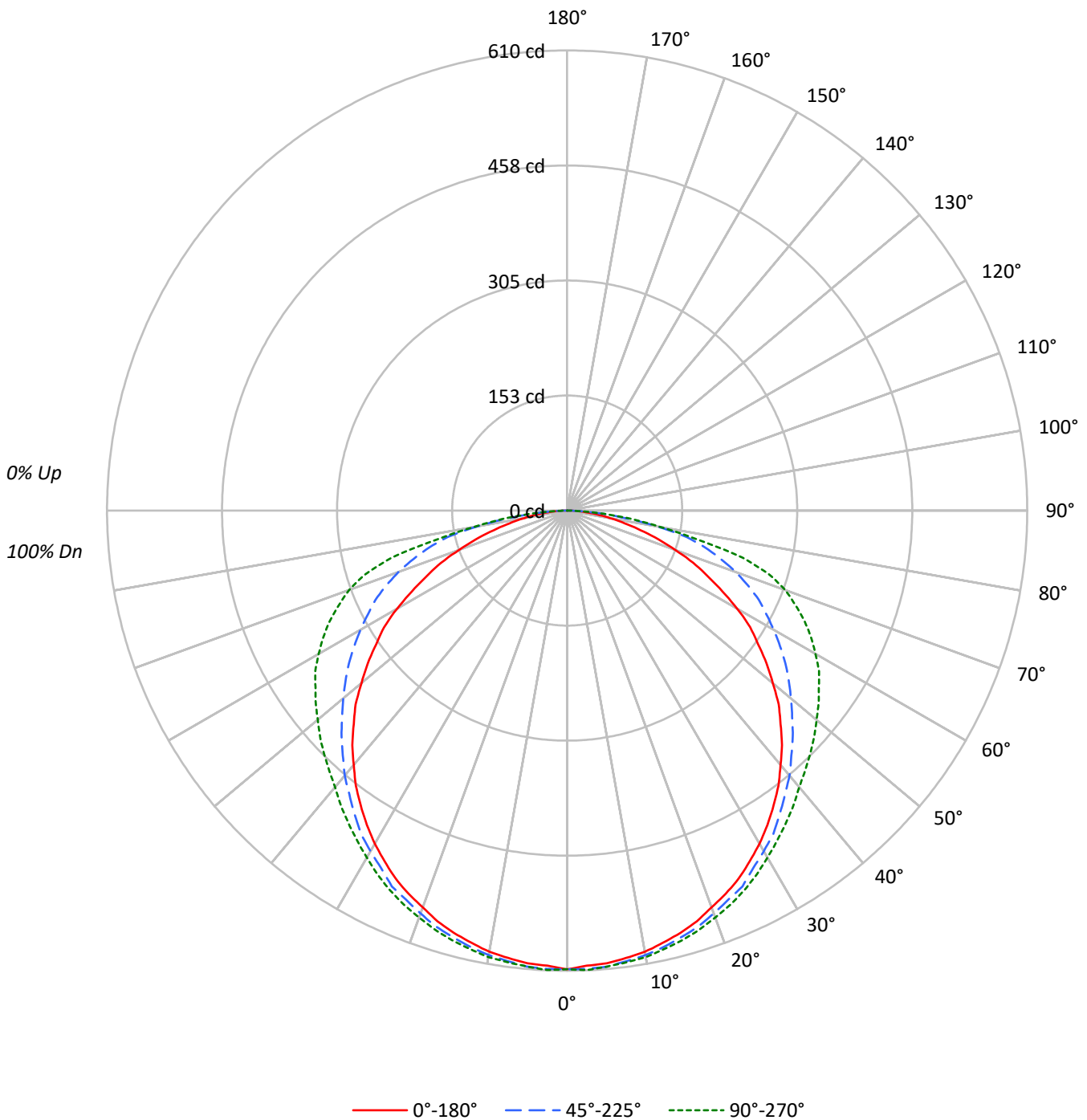
Input Watts (W): 25.8
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	92	89		92	89	86		88	86	84	82
2	97	88	81	75	95	86	80	74	83	77	72		80	75	71		76	72	69	67
3	88	77	68	61	86	75	67	61	72	65	60		70	64	59		67	62	58	55
4	80	68	59	51	78	66	58	51	64	56	50		61	55	50		59	54	49	47
5	74	60	51	44	72	59	50	44	57	49	43		55	48	43		53	47	42	40
6	68	54	45	38	66	53	44	38	51	43	38		50	43	37		48	42	37	35
7	63	49	40	33	61	48	39	33	47	39	33		45	38	33		44	37	33	31
8	59	45	36	30	57	44	35	30	43	35	29		41	34	29		40	34	29	27
9	55	41	32	27	53	40	32	27	39	32	26		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°	1636	1636	1636
5°	1627	1639	1639
10°	1623	1635	1642
15°	1615	1631	1643
20°	1603	1627	1644
25°	1598	1632	1649
30°	1584	1620	1651
35°	1567	1614	1661
40°	1546	1611	1681
45°	1523	1610	1734
50°	1490	1622	1806
55°	1450	1657	1911
60°	1403	1702	2047
65°	1306	1787	2213
70°	1199	1871	2420
75°	1051	1969	2503
80°	905	1877	1965
85°	790	1365	1494



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	57.5	3.0
10°-20°	165.2	8.5
20°-30°	252.0	13.0
30°-40°	307.7	15.9
40°-50°	329.0	17.0
50°-60°	317.5	16.4
60°-70°	273.3	14.1
70°-80°	185.0	9.6
80°-90°	48.8	2.5
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°	474.7	24.5
0°-40°	782.4	40.4
0°-60°	1428.9	73.8
0°-90°	1936.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1936.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	608	608	608	608	608	
5°	602	604	607	607	607	57
15°	580	581	585	588	590	164
25°	538	541	550	553	555	248
35°	477	481	491	501	506	299
45°	400	407	423	444	456	309
55°	309	319	353	389	407	277
65°	205	225	281	325	348	204
75°	101	134	189	228	241	108
85°	26	36	44	46	48	29
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	608.1	608.1	608.1	608.1	608.1
2.5°	603.9	605.3	608.1	608.1	609.6
5°	602.4	603.9	606.7	606.7	606.7
7.5°	598.2	599.6	602.4	603.9	603.9
10°	593.9	595.3	598.2	599.6	601.0
12.5°	586.8	588.2	592.5	595.3	595.3
15°	579.6	581.1	585.3	588.2	589.6
17.5°	571.1	574.0	578.2	581.1	582.5
20°	559.7	562.6	568.3	572.5	574.0
22.5°	549.7	552.6	558.3	562.6	565.4
25°	538.3	541.2	549.7	552.6	555.4
27.5°	524.1	527.0	534.1	539.8	544.0
30°	509.9	512.7	521.3	528.4	531.2
32.5°	494.2	498.5	508.4	514.1	518.4
35°	477.1	481.4	491.3	501.3	505.6
37.5°	460.0	464.3	474.3	487.1	492.8
40°	440.1	445.8	458.6	475.7	478.5
42.5°	421.6	428.7	440.1	460.0	467.1
45°	400.2	407.3	423.0	444.3	455.7
47.5°	380.3	387.4	404.5	430.1	444.3
50°	356.0	366.0	387.4	417.3	431.5
52.5°	333.3	341.8	370.3	403.0	420.1
55°	309.1	319.0	353.2	388.8	407.3
57.5°	287.7	296.2	334.7	374.6	395.9
60°	260.6	272.0	316.2	358.9	380.3
62.5°	232.1	249.2	297.7	341.8	364.6
65°	205.1	225.0	280.6	324.7	347.5
67.5°	180.9	202.2	259.2	306.2	327.6
70°	152.4	179.4	237.8	283.4	307.6
72.5°	126.8	156.7	213.6	259.2	280.6
75°	101.1	133.9	189.4	227.9	240.7
77.5°	78.3	109.7	162.4	173.8	175.2
80°	58.4	86.9	121.1	122.5	126.8
82.5°	39.9	61.2	78.3	85.5	86.9
85°	25.6	35.6	44.2	45.6	48.4
87.5°	11.4	12.8	15.7	14.2	14.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)