

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: P274755

Luminaire Tested: **22CZ2-34HE-RDP-UNV-L930-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: P274755
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-L930-CD1-U
Description: 2'X2' TROFFER LED MODULE,SMOOTH LENS WITH INSERT, 90CRI
Light Source: (196) 3000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER
Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1869.7 lumens
Efficiency: N/A
Efficacy: 72.5 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

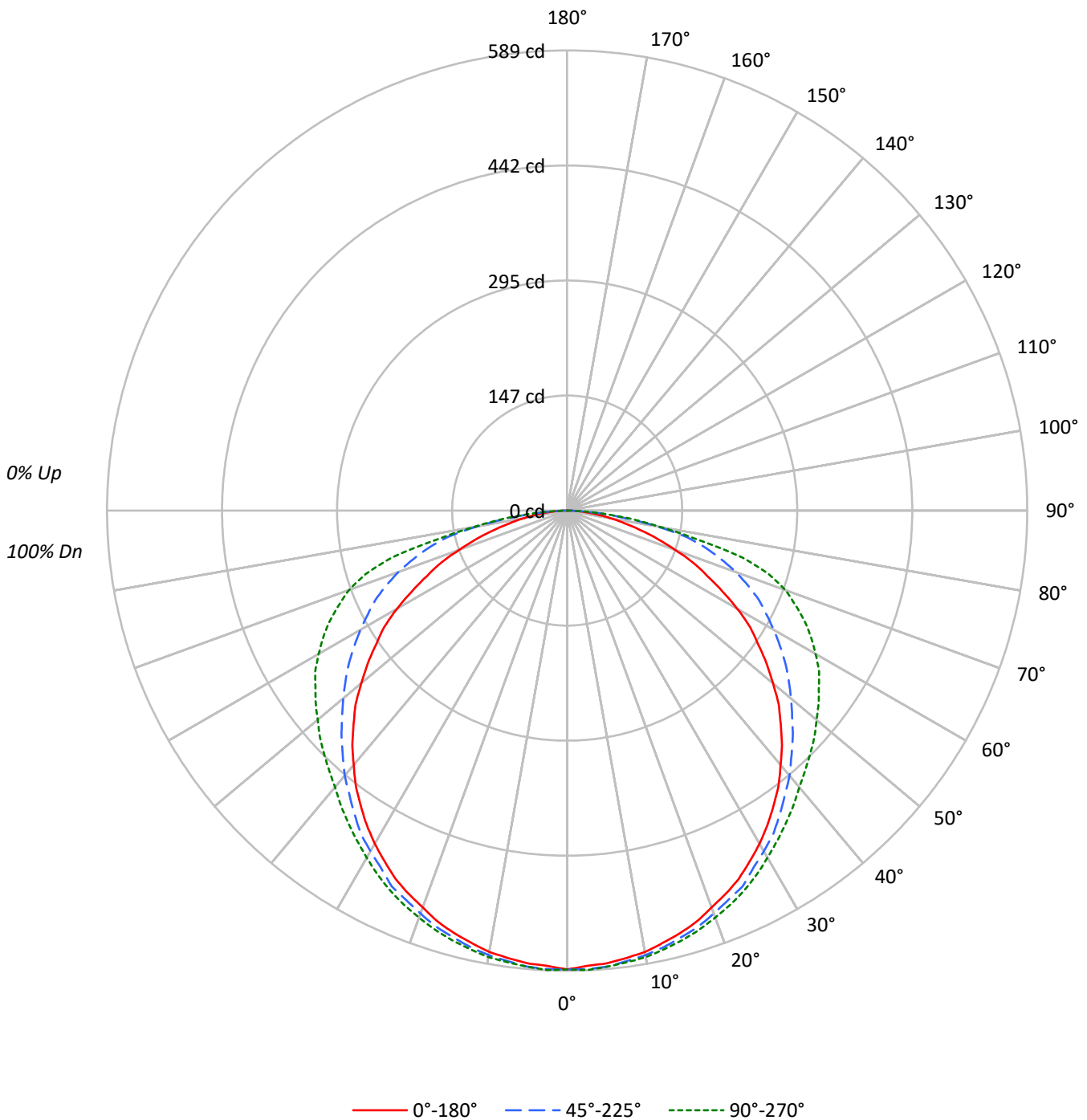
Input Watts (W): 25.8
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1580	1580	1580
5°	1572	1583	1583
10°	1567	1579	1586
15°	1560	1575	1586
20°	1548	1572	1587
25°	1544	1576	1593
30°	1530	1564	1594
35°	1514	1559	1604
40°	1493	1556	1623
45°	1471	1555	1675
50°	1440	1566	1745
55°	1400	1600	1846
60°	1355	1643	1976
65°	1261	1726	2137
70°	1158	1807	2338
75°	1016	1902	2416
80°	874	1812	1897
85°	766	1315	1445



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	55.6	3.0
10°-20°	159.5	8.5
20°-30°	243.4	13.0
30°-40°	297.1	15.9
40°-50°	317.7	17.0
50°-60°	306.7	16.4
60°-70°	264.0	14.1
70°-80°	178.6	9.6
80°-90°	47.1	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°	458.4	24.5
0°-40°	755.6	40.4
0°-60°	1380.0	73.8
0°-90°	1869.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1869.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	587	587	587	587	587	
5°	582	583	586	586	586	55
15°	560	561	565	568	569	158
25°	520	523	531	534	536	239
35°	461	465	474	484	488	288
45°	386	393	408	429	440	298
55°	298	308	341	376	393	267
65°	198	217	271	314	336	197
75°	98	129	183	220	232	105
85°	25	34	43	44	47	28
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	587.3	587.3	587.3	587.3	587.3
2.5°	583.2	584.6	587.3	587.3	588.7
5°	581.8	583.2	585.9	585.9	585.9
7.5°	577.7	579.1	581.8	583.2	583.2
10°	573.6	574.9	577.7	579.1	580.4
12.5°	566.7	568.0	572.2	574.9	574.9
15°	559.8	561.2	565.3	568.0	569.4
17.5°	551.5	554.3	558.4	561.2	562.5
20°	540.5	543.3	548.8	552.9	554.3
22.5°	530.9	533.7	539.2	543.3	546.0
25°	519.9	522.7	530.9	533.7	536.4
27.5°	506.2	508.9	515.8	521.3	525.4
30°	492.4	495.2	503.4	510.3	513.0
32.5°	477.3	481.4	491.0	496.5	500.7
35°	460.8	464.9	474.5	484.1	488.3
37.5°	444.3	448.4	458.0	470.4	475.9
40°	425.0	430.5	442.9	459.4	462.1
42.5°	407.1	414.0	425.0	444.3	451.1
45°	386.5	393.4	408.5	429.1	440.1
47.5°	367.2	374.1	390.6	415.4	429.1
50°	343.9	353.5	374.1	403.0	416.8
52.5°	321.8	330.1	357.6	389.2	405.7
55°	298.5	308.1	341.1	375.5	393.4
57.5°	277.8	286.1	323.2	361.7	382.4
60°	251.7	262.7	305.3	346.6	367.2
62.5°	224.2	240.7	287.5	330.1	352.1
65°	198.1	217.3	271.0	313.6	335.6
67.5°	174.7	195.3	250.3	295.7	316.3
70°	147.2	173.3	229.7	273.7	297.1
72.5°	122.4	151.3	206.3	250.3	271.0
75°	97.7	129.3	182.9	220.1	232.4
77.5°	75.6	105.9	156.8	167.8	169.2
80°	56.4	83.9	116.9	118.3	122.4
82.5°	38.5	59.1	75.6	82.5	83.9
85°	24.8	34.4	42.6	44.0	46.8
87.5°	11.0	12.4	15.1	13.8	13.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)