

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: P295011

Luminaire Tested: **24CZ2-30HE-HRP-UNV-L930-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: P295011
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: 24CZ2-30HE-HRP-UNV-L930-CD1-U
Description: 2'x4' TROFFER LED MODULE, HIGH EFFICIENCY ROUND PERF. LENS
Light Source: (168) 3000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER
Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1931.5 lumens
Efficiency: N/A
Efficacy: 86.2 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

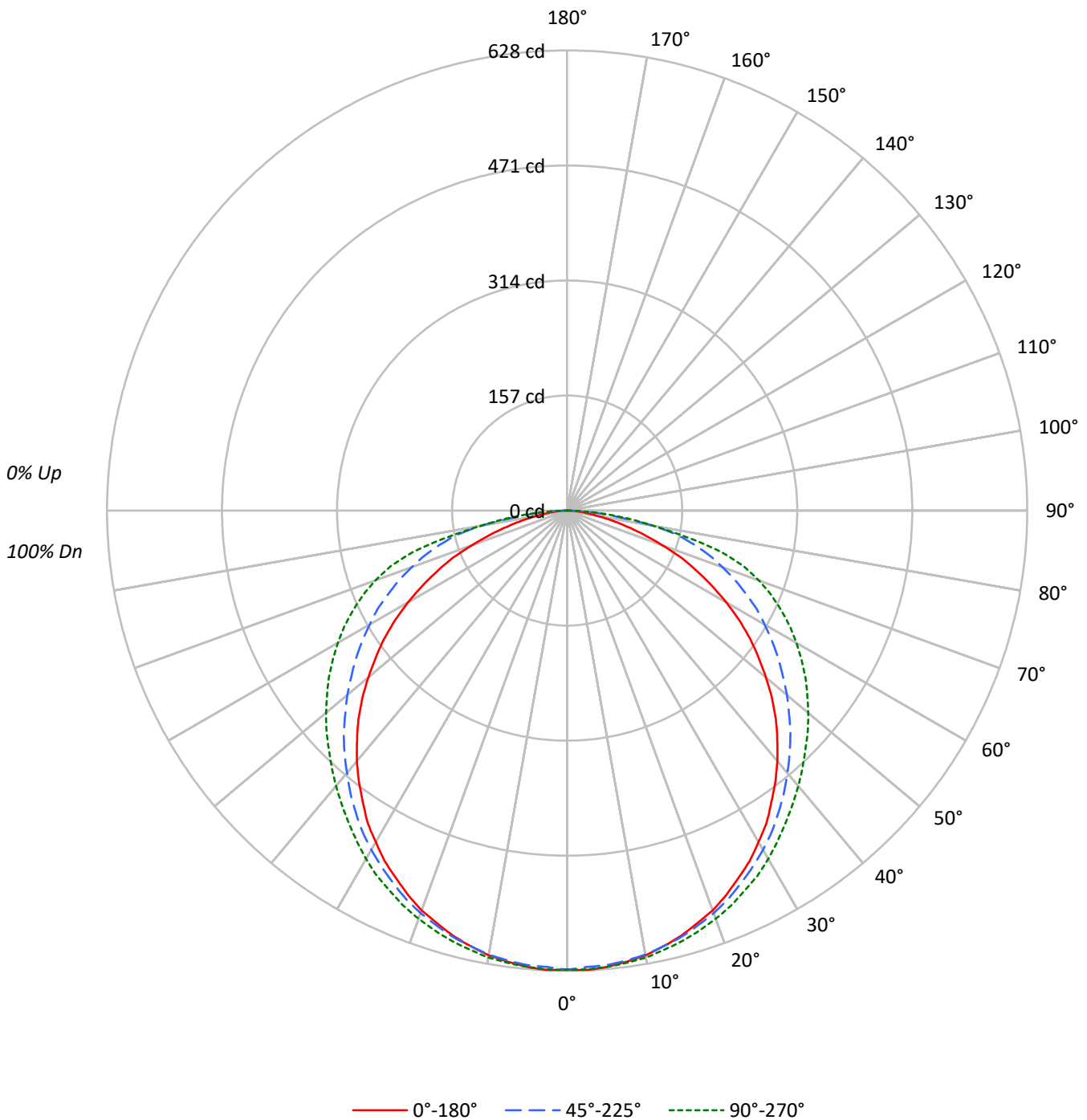
Input Watts (W): 22.4
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	843	843	843
5°	844	841	844
10°	842	841	846
15°	837	839	847
20°	831	837	849
25°	821	833	850
30°	812	830	853
35°	798	826	854
40°	784	821	862
45°	766	820	875
50°	741	819	899
55°	715	825	931
60°	675	838	973
65°	623	857	1027
70°	544	887	1094
75°	441	933	1131
80°	325	915	915
85°	250	675	761



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	59.4	3.1
10°-20°	170.5	8.8
20°-30°	259.5	13.4
30°-40°	315.1	16.3
40°-50°	332.9	17.2
50°-60°	314.1	16.3
60°-70°	261.2	13.5
70°-80°	171.9	8.9
80°-90°	46.8	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°	489.4	25.3
0°-40°	804.5	41.7
0°-60°	1451.6	75.2
0°-90°	1931.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1931.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	627	627	627	627	627	
5°	625	625	623	625	625	59
15°	601	602	602	608	608	169
25°	553	556	561	571	572	255
35°	486	492	503	516	520	304
45°	403	411	431	452	460	310
55°	305	318	352	385	397	272
65°	196	218	269	309	323	193
75°	85	124	180	213	218	91
85°	16	36	44	48	49	20
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	626.7	626.7	626.7	626.7	626.7
2.5°	627.5	626.7	623.4	626.7	626.7
5°	625.1	625.1	622.6	625.1	625.1
7.5°	621.0	621.0	619.4	622.6	622.6
10°	616.2	616.2	615.3	619.4	619.4
12.5°	608.9	609.7	608.9	613.7	613.7
15°	600.8	601.6	602.4	608.1	608.1
17.5°	590.3	591.9	593.5	600.0	600.8
20°	580.6	581.4	584.6	591.9	592.7
22.5°	567.6	570.1	574.1	581.4	583.8
25°	553.1	556.3	561.2	570.9	572.5
27.5°	539.3	541.8	548.2	558.7	562.0
30°	522.4	526.4	534.5	545.0	549.0
32.5°	506.2	510.2	519.9	531.3	534.5
35°	486.0	491.6	503.0	515.9	519.9
37.5°	466.6	472.2	486.0	500.5	505.4
40°	446.3	452.8	467.4	484.4	490.8
42.5°	424.5	433.4	449.6	468.2	475.5
45°	402.7	410.8	431.0	452.0	460.1
47.5°	379.2	388.9	410.8	435.8	445.5
50°	354.2	366.3	391.4	418.9	429.4
52.5°	329.1	342.8	371.1	401.9	413.2
55°	304.8	317.8	351.7	384.9	397.0
57.5°	278.2	294.3	331.5	367.1	379.2
60°	250.7	268.5	311.3	348.5	361.4
62.5°	223.2	243.4	291.9	329.1	342.8
65°	195.7	218.3	269.3	308.9	322.6
67.5°	169.0	194.1	248.2	287.9	301.6
70°	138.3	169.8	225.6	264.4	278.2
72.5°	110.0	146.4	203.8	240.2	252.3
75°	84.9	123.7	179.5	212.7	217.5
77.5°	62.3	101.1	154.4	165.8	166.6
80°	42.0	80.9	118.1	116.4	118.1
82.5°	27.5	60.6	74.4	83.3	84.1
85°	16.2	35.6	43.7	48.5	49.3
87.5°	8.1	12.1	15.4	16.2	17.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)