

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: P295014

Luminaire Tested: **24CZ2-30HE-HRP-UNV-L950-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: P295014
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-L950-CD1-U
Description: 2'x4' TROFFER LED MODULE, HIGH EFFICIENCY ROUND PERF. LENS
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: 2122.6 lumens
Efficiency: N/A
Efficacy: 94.8 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

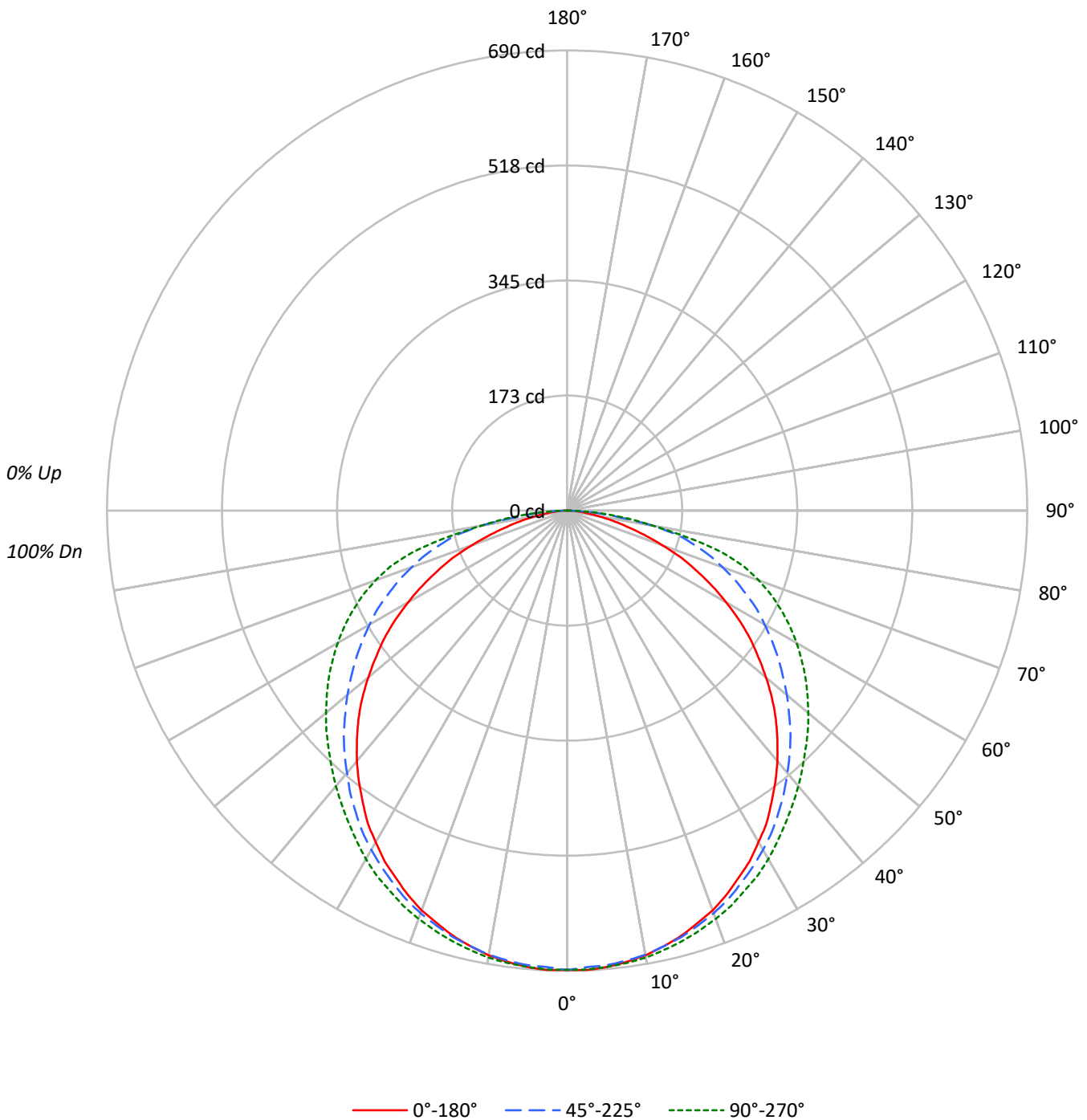
Input Watts (W): 22.4
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	927	927	927
5°	928	924	928
10°	925	924	930
15°	920	922	931
20°	914	920	933
25°	902	916	934
30°	892	913	937
35°	877	908	939
40°	862	902	947
45°	842	901	962
50°	815	900	988
55°	786	907	1023
60°	741	921	1069
65°	684	942	1129
70°	598	975	1203
75°	485	1026	1242
80°	358	1005	1005
85°	275	741	837



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	65.2	3.1
10°-20°	187.3	8.8
20°-30°	285.2	13.4
30°-40°	346.3	16.3
40°-50°	365.9	17.2
50°-60°	345.2	16.3
60°-70°	287.1	13.5
70°-80°	188.9	8.9
80°-90°	51.5	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°	537.8	25.3
0°-40°	884.1	41.7
0°-60°	1595.2	75.2
0°-90°	2122.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2122.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	689	689	689	689	689	
5°	687	687	684	687	687	65
15°	660	661	662	668	668	186
25°	608	611	617	627	629	280
35°	534	540	553	567	571	334
45°	442	451	474	497	506	341
55°	335	349	386	423	436	298
65°	215	240	296	339	355	213
75°	93	136	197	234	239	101
85°	18	39	48	53	54	22
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	688.7	688.7	688.7	688.7	688.7
2.5°	689.6	688.7	685.1	688.7	688.7
5°	686.9	686.9	684.2	686.9	686.9
7.5°	682.5	682.5	680.7	684.2	684.2
10°	677.1	677.1	676.2	680.7	680.7
12.5°	669.1	670.0	669.1	674.5	674.5
15°	660.2	661.1	662.0	668.2	668.2
17.5°	648.7	650.5	652.2	659.3	660.2
20°	638.0	638.9	642.5	650.5	651.3
22.5°	623.8	626.5	630.9	638.9	641.6
25°	607.8	611.4	616.7	627.4	629.1
27.5°	592.7	595.4	602.5	614.0	617.6
30°	574.0	578.5	587.4	598.9	603.4
32.5°	556.3	560.7	571.4	583.8	587.4
35°	534.1	540.3	552.7	566.9	571.4
37.5°	512.7	518.9	534.1	550.0	555.4
40°	490.5	497.6	513.6	532.3	539.4
42.5°	466.5	476.3	494.1	514.5	522.5
45°	442.5	451.4	473.6	496.7	505.6
47.5°	416.8	427.4	451.4	479.0	489.6
50°	389.2	402.5	430.1	460.3	471.9
52.5°	361.7	376.8	407.9	441.6	454.1
55°	335.0	349.2	386.5	423.0	436.3
57.5°	305.7	323.5	364.3	403.4	416.8
60°	275.5	295.0	342.1	383.0	397.2
62.5°	245.3	267.5	320.8	361.7	376.8
65°	215.0	239.9	295.9	339.4	354.6
67.5°	185.7	213.3	272.8	316.3	331.5
70°	152.0	186.6	247.9	290.6	305.7
72.5°	120.9	160.8	223.9	263.9	277.2
75°	93.3	136.0	197.3	233.7	239.0
77.5°	68.4	111.1	169.7	182.2	183.1
80°	46.2	88.9	129.7	128.0	129.7
82.5°	30.2	66.6	81.8	91.5	92.4
85°	17.8	39.1	48.0	53.3	54.2
87.5°	8.9	13.3	16.9	17.8	19.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)