

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: P294843

Luminaire Tested: **22CZ2-32-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: P294843
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1808-918-22)
Test Lab: INNOVATIONS CENTER(G3)
Issue Date: 12/2/2019
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ2-32-HRP-UNV-L930-CD1-U
Description: 2'X2' TROFFER LED MODULE, HIGH EFFICIENCY ROUND PERF. LENS
Light Source: (98) 3000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER
Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2179.0 lumens
Efficiency: N/A
Efficacy: 81.6 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.29 / 1.38
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

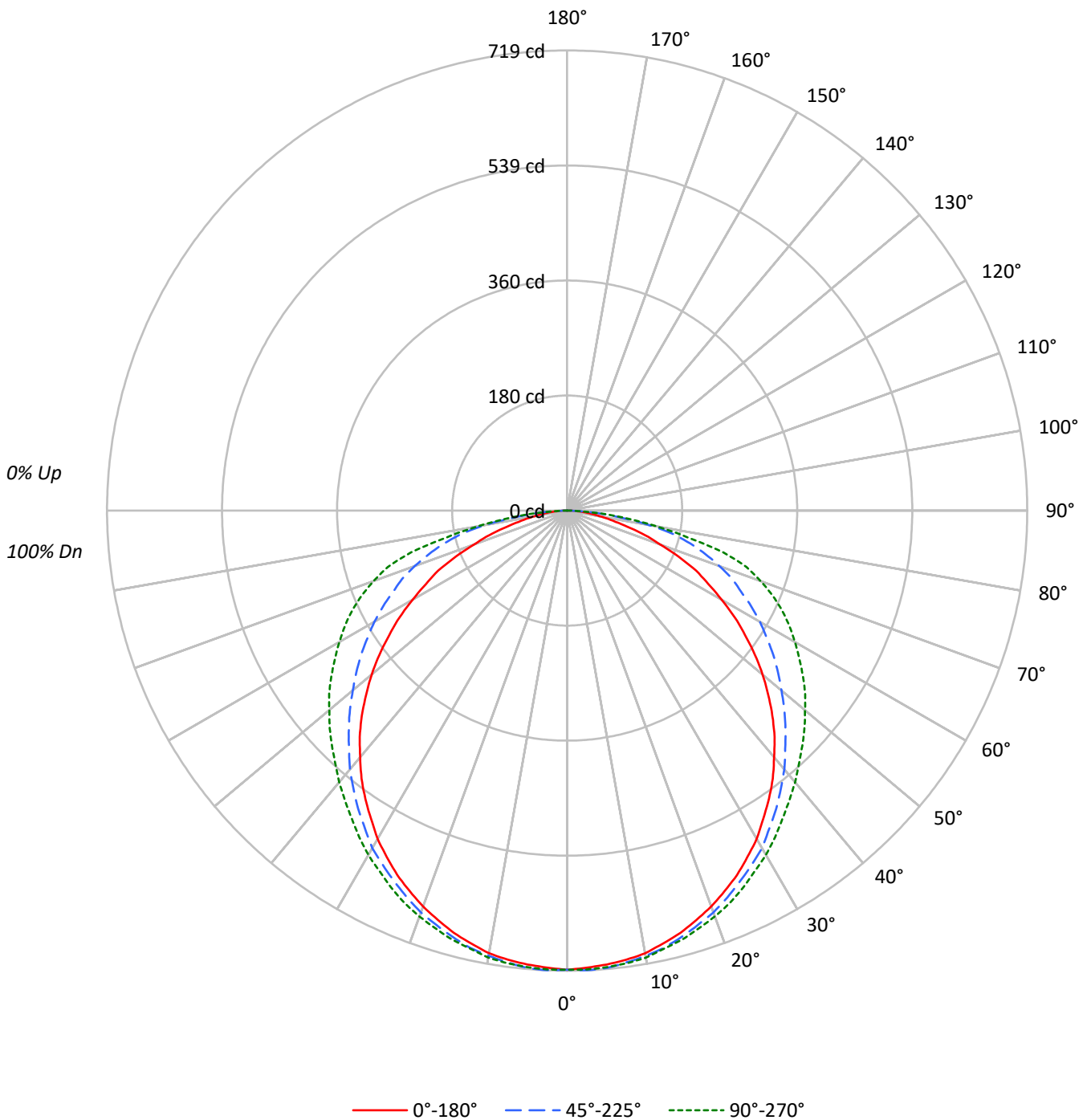
Input Watts (W): 26.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	87	84	82
2	98	89	82	76	95	87	80	75	84	78	73	80	75	71	77	73	70	68
3	89	78	69	62	86	76	68	62	73	66	61	70	64	60	68	63	59	56
4	81	69	59	52	79	67	59	52	65	57	51	62	56	51	60	55	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	39	50	43	38	49	43	38	36
7	64	50	41	34	62	49	40	34	47	40	34	46	39	34	44	38	33	31
8	59	45	37	31	58	45	36	31	43	36	30	42	35	30	41	35	30	28
9	55	42	33	28	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	25	35	29	24	23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1931	1931	1931
5°	1923	1938	1935
10°	1919	1931	1938
15°	1903	1922	1934
20°	1885	1913	1933
25°	1865	1898	1931
30°	1841	1892	1931
35°	1806	1870	1928
40°	1767	1854	1946
45°	1726	1836	1977
50°	1669	1830	2031
55°	1593	1844	2109
60°	1502	1872	2212
65°	1418	1908	2363
70°	1212	1990	2531
75°	1015	2072	2629
80°	831	2002	2194
85°	722	1485	1612



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	68.0	3.1
10°-20°	194.5	8.9
20°-30°	294.8	13.5
30°-40°	356.0	16.3
40°-50°	374.1	17.2
50°-60°	351.9	16.2
60°-70°	293.4	13.5
70°-80°	194.4	8.9
80°-90°	51.8	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°	557.3	25.6
0°-40°	913.3	41.9
0°-60°	1639.3	75.2
0°-90°	2179.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2179.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	718	718	718	718	718	
5°	712	713	718	718	716	68
15°	683	686	690	693	694	193
25°	628	632	639	647	650	289
35°	550	555	569	581	587	344
45°	454	460	482	507	520	349
55°	340	355	393	433	450	304
65°	223	242	300	349	371	217
75°	98	136	199	241	253	106
85°	23	36	48	52	52	27
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	717.5	717.5	717.5	717.5	717.5
2.5°	714.8	716.2	718.9	718.9	717.5
5°	712.0	713.4	717.5	717.5	716.2
7.5°	707.9	709.3	712.0	714.8	713.4
10°	702.4	703.8	706.5	709.3	709.3
12.5°	692.8	694.2	699.7	701.0	701.0
15°	683.2	685.9	690.0	692.8	694.2
17.5°	670.8	673.5	679.0	684.5	684.5
20°	658.4	661.2	668.0	673.5	674.9
22.5°	643.3	647.4	654.3	661.2	663.9
25°	628.2	632.3	639.2	647.4	650.2
27.5°	610.3	614.4	624.1	633.7	635.1
30°	592.4	596.6	608.9	617.2	621.3
32.5°	570.5	575.9	588.3	600.7	604.8
35°	549.8	555.3	569.1	581.4	586.9
37.5°	527.8	533.3	548.5	563.6	570.5
40°	503.1	510.0	527.8	544.3	554.0
42.5°	479.7	486.6	504.5	526.5	536.1
45°	453.6	460.5	482.5	507.2	519.6
47.5°	426.1	434.4	460.5	490.7	503.1
50°	398.6	408.3	437.1	471.5	485.2
52.5°	369.8	382.1	415.1	452.2	468.7
55°	339.5	354.6	393.1	433.0	449.5
57.5°	310.7	324.4	369.8	412.4	430.2
60°	279.0	296.9	347.8	391.8	411.0
62.5°	248.8	268.0	324.4	371.1	391.8
65°	222.7	241.9	299.7	349.1	371.1
67.5°	188.3	214.4	279.0	325.8	347.8
70°	154.0	189.7	252.9	301.0	321.7
72.5°	127.8	162.2	226.8	274.9	294.2
75°	97.6	136.1	199.3	240.6	252.9
77.5°	72.9	112.7	170.4	191.1	192.4
80°	53.6	86.6	129.2	136.1	141.6
82.5°	37.1	60.5	83.8	92.1	94.8
85°	23.4	35.7	48.1	52.2	52.2
87.5°	12.4	13.7	16.5	16.5	16.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)