

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: P295018

Luminaire Tested: **24CZ2-30-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: P295018
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: 24CZ2-30-HRP-UNV-L950-CD1-U
Description: 2'x4' TROFFER LED MODULE, HIGH EFFICIENCY ROUND PERF. LENS
Light Source: (84) 5000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER
Luminaire Equipment: Sample No. Condition Description

Summary

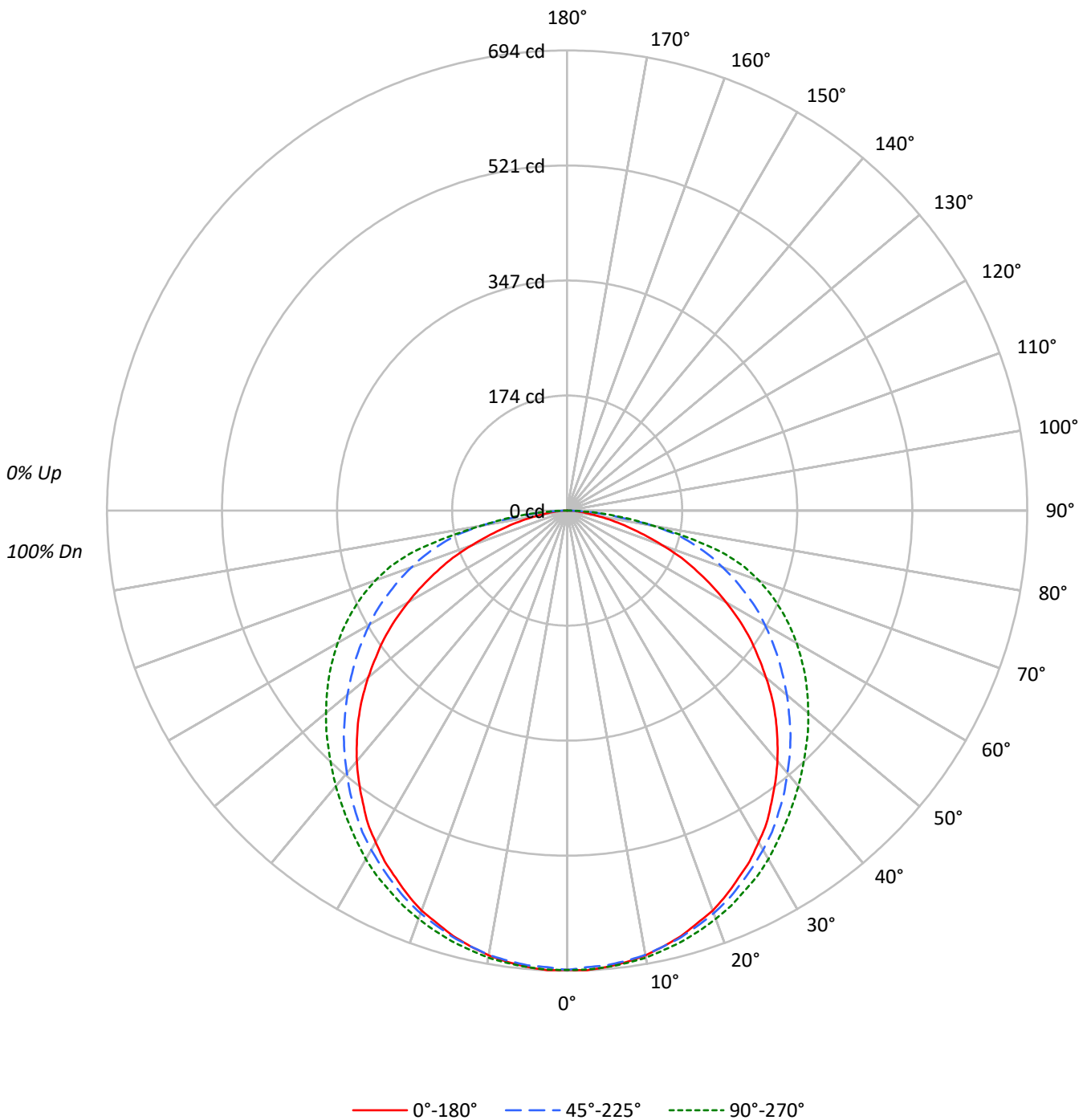
Lumens per Lamp: N/A
Luminaire Lumens: 2135.3 lumens
Efficiency: N/A
Efficacy: 88.2 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.3 / 1.4
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 24.2
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°	932	932	932
5°	933	930	933
10°	931	929	936
15°	925	928	936
20°	919	925	938
25°	908	921	940
30°	897	918	943
35°	883	913	944
40°	867	908	953
45°	847	907	968
50°	819	906	994
55°	791	912	1030
60°	746	926	1075
65°	689	948	1136
70°	602	981	1210
75°	488	1032	1250
80°	360	1011	1011
85°	276	746	841



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	65.6	3.1
10°-20°	188.5	8.8
20°-30°	286.9	13.4
30°-40°	348.4	16.3
40°-50°	368.1	17.2
50°-60°	347.3	16.3
60°-70°	288.8	13.5
70°-80°	190.0	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°	541.0	25.3
0°-40°	889.4	41.7
0°-60°	1604.8	75.2
0°-90°	2135.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2135.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	693	693	693	693	693	
5°	691	691	688	691	691	66
15°	664	665	666	672	672	187
25°	612	615	620	631	633	282
35°	537	544	556	570	575	336
45°	445	454	476	500	509	343
55°	337	351	389	426	439	300
65°	216	241	298	342	357	214
75°	94	137	198	235	240	101
85°	18	39	48	54	54	22
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	692.8	692.8	692.8	692.8	692.8
2.5°	693.7	692.8	689.2	692.8	692.8
5°	691.0	691.0	688.3	691.0	691.0
7.5°	686.6	686.6	684.8	688.3	688.3
10°	681.2	681.2	680.3	684.8	684.8
12.5°	673.1	674.0	673.1	678.5	678.5
15°	664.2	665.1	666.0	672.2	672.2
17.5°	652.6	654.4	656.2	663.3	664.2
20°	641.9	642.7	646.3	654.4	655.3
22.5°	627.6	630.2	634.7	642.7	645.4
25°	611.5	615.0	620.4	631.1	632.9
27.5°	596.3	598.9	606.1	617.7	621.3
30°	577.5	582.0	590.9	602.5	607.0
32.5°	559.6	564.1	574.8	587.3	590.9
35°	537.3	543.5	556.0	570.3	574.8
37.5°	515.8	522.1	537.3	553.4	558.7
40°	493.5	500.6	516.7	535.5	542.6
42.5°	469.3	479.2	497.0	517.6	525.6
45°	445.2	454.1	476.5	499.7	508.7
47.5°	419.3	430.0	454.1	481.8	492.6
50°	391.5	405.0	432.7	463.1	474.7
52.5°	363.8	379.0	410.3	444.3	456.8
55°	337.0	351.3	388.9	425.5	438.9
57.5°	307.5	325.4	366.5	405.9	419.3
60°	277.1	296.8	344.2	385.3	399.6
62.5°	246.7	269.1	322.7	363.8	379.0
65°	216.3	241.4	297.7	341.5	356.7
67.5°	186.8	214.5	274.4	318.2	333.4
70°	152.9	187.7	249.4	292.3	307.5
72.5°	121.6	161.8	225.3	265.5	278.9
75°	93.9	136.8	198.5	235.1	240.5
77.5°	68.8	111.7	170.7	183.3	184.2
80°	46.5	89.4	130.5	128.7	130.5
82.5°	30.4	67.0	82.2	92.1	93.0
85°	17.9	39.3	48.3	53.6	54.5
87.5°	8.9	13.4	17.0	17.9	19.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)