

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: P272033

Luminaire Tested: **22CZ2-34HE-S-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: P272033
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-23)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ2-34HE-S-UNV-L930-CD1-U
Description: 2'X2' TROFFER LED MODULE,SMOOTH LENS, 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: 2946.1 lumens
Efficiency: N/A
Efficacy: 114.2 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 1.26 / 1.34
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

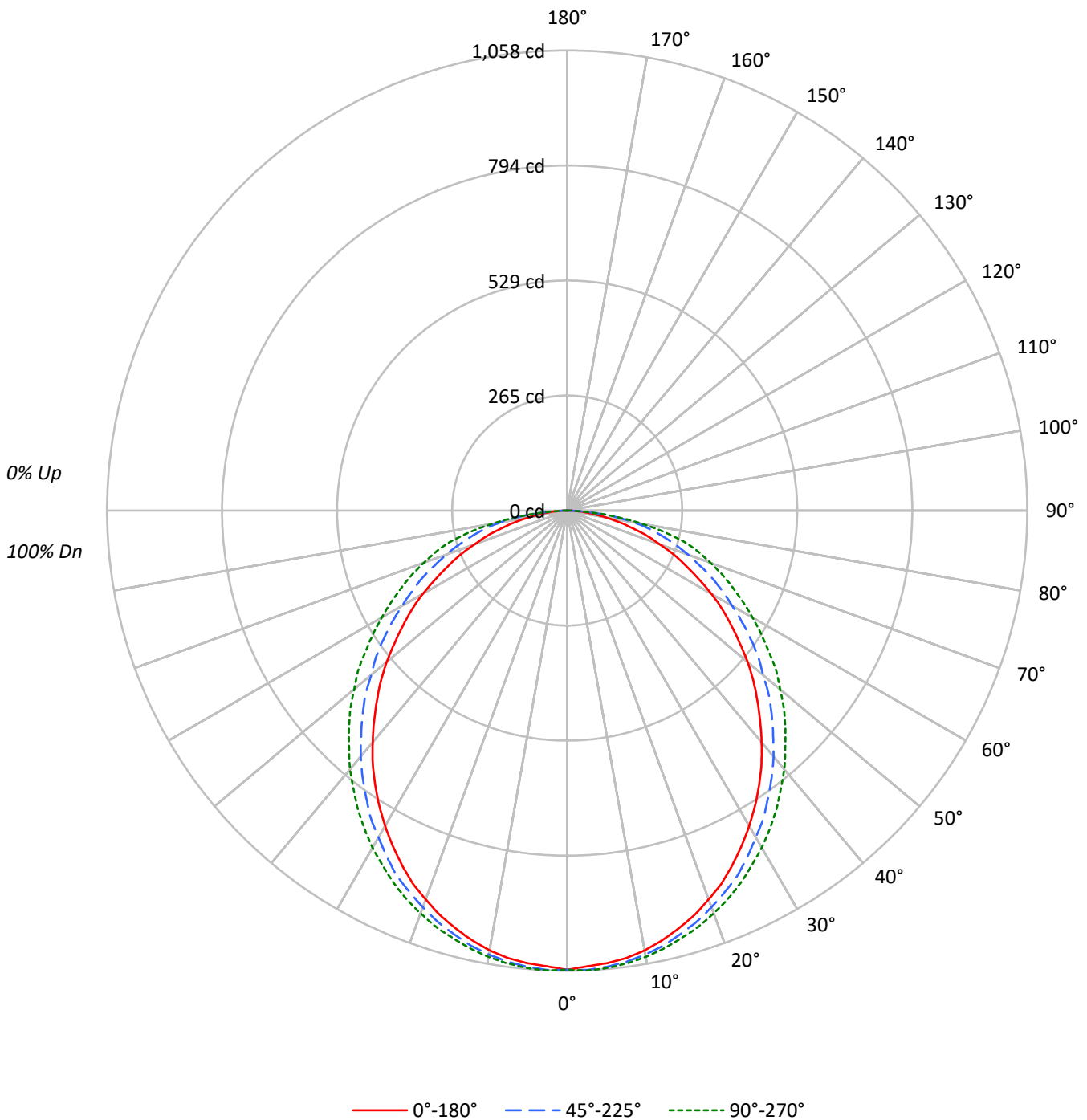
Input Watts (W): 25.8
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	99	95	106	101	97	94	97	94	91		93	90	88		89	87	85	83
2	98	90	83	77	96	88	82	76	84	79	74		81	77	73		78	74	71	69
3	90	79	71	64	87	77	70	63	74	68	62		72	66	61		69	64	60	58
4	82	70	61	54	80	69	60	54	66	59	53		64	57	52		61	56	52	49
5	75	62	53	47	73	61	53	46	59	52	46		57	51	45		55	50	45	43
6	70	56	47	41	68	55	47	41	53	46	40		52	45	40		50	44	39	37
7	65	51	42	36	63	50	42	36	49	41	36		47	40	35		46	40	35	33
8	60	47	38	32	59	46	38	32	45	37	32		43	37	32		42	36	31	30
9	56	43	35	29	55	42	34	29	41	34	29		40	33	29		39	33	28	27
10	53	40	32	26	51	39	31	26	38	31	26		37	31	26		36	30	26	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2841	2841	2841
5°	2822	2844	2852
10°	2806	2832	2847
15°	2769	2807	2834
20°	2724	2779	2822
25°	2669	2751	2804
30°	2601	2695	2781
35°	2529	2646	2755
40°	2443	2593	2728
45°	2354	2532	2699
50°	2267	2463	2676
55°	2160	2419	2657
60°	2064	2360	2648
65°	1926	2346	2678
70°	1773	2325	2758
75°	1601	2358	2901
80°	1384	2428	2726
85°	1145	2038	2038



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	99.8	3.4
10°-20°	284.1	9.6
20°-30°	425.1	14.4
30°-40°	503.4	17.1
40°-50°	513.0	17.4
50°-60°	459.8	15.6
60°-70°	360.0	12.2
70°-80°	232.1	7.9
80°-90°	68.6	2.3
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°	809.0	27.5
0°-40°	1312.5	44.5
0°-60°	2285.4	77.6
0°-90°	2946.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2946.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1056	1056	1056	1056	1056	
5°	1045	1047	1053	1054	1056	99
15°	994	999	1008	1016	1017	280
25°	899	907	926	939	944	414
35°	770	779	806	830	838	481
45°	619	632	665	700	709	478
55°	460	476	516	551	566	413
65°	302	320	368	404	421	300
75°	154	177	227	265	279	165
85°	37	51	66	66	66	44
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1055.7	1055.7	1055.7	1055.7	1055.7
2.5°	1048.8	1051.6	1057.1	1058.4	1058.4
5°	1044.7	1047.4	1052.9	1054.3	1055.7
7.5°	1037.8	1039.2	1046.1	1048.8	1050.2
10°	1026.8	1029.6	1036.4	1040.6	1041.9
12.5°	1011.7	1015.8	1024.1	1029.6	1030.9
15°	993.8	999.3	1007.6	1015.8	1017.2
17.5°	974.6	980.1	991.1	1000.7	1003.4
20°	951.2	958.1	970.5	981.5	985.6
22.5°	927.8	933.3	948.5	962.2	966.3
25°	899.0	907.2	926.5	938.8	944.3
27.5°	868.7	878.4	897.6	914.1	919.6
30°	837.1	846.7	867.4	888.0	894.9
32.5°	804.1	815.1	839.9	860.5	867.4
35°	769.8	779.4	805.5	830.2	838.5
37.5°	734.0	742.3	772.5	798.6	806.9
40°	695.5	706.5	738.2	768.4	776.6
42.5°	657.1	669.4	701.0	734.0	742.3
45°	618.6	632.3	665.3	699.7	709.3
47.5°	581.4	592.4	629.6	662.5	676.3
50°	541.6	552.6	588.3	625.4	639.2
52.5°	500.3	515.5	554.0	589.7	606.2
55°	460.5	475.6	515.5	551.2	566.3
57.5°	423.4	435.7	477.0	514.1	529.2
60°	383.5	394.5	438.5	478.4	492.1
62.5°	340.9	357.4	402.8	439.9	456.4
65°	302.4	320.3	368.4	404.1	420.6
67.5°	266.7	283.2	329.9	368.4	386.3
70°	225.4	247.4	295.5	334.0	350.5
72.5°	192.4	211.7	261.2	299.7	317.5
75°	154.0	177.3	226.8	265.3	279.0
77.5°	122.3	145.7	192.4	222.7	229.6
80°	89.3	112.7	156.7	171.8	175.9
82.5°	60.5	82.5	112.7	116.8	118.2
85°	37.1	50.9	66.0	66.0	66.0
87.5°	17.9	20.6	23.4	22.0	22.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)