

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: P277367

Luminaire Tested: **22CZ2-34HE-S-UNV-L93050-W2A1-U-4000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P277367
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-L93050-W2A1-U-4000K
Description: CRUZE 2.0 2x2 TUNABLE WHITE LED TROFFER WITH SMOOTH LENS
Light Source: (168) 90 CRI LEDS TUNED TO 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3100.0 lumens
Efficiency: N/A
Efficacy: 117.7 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

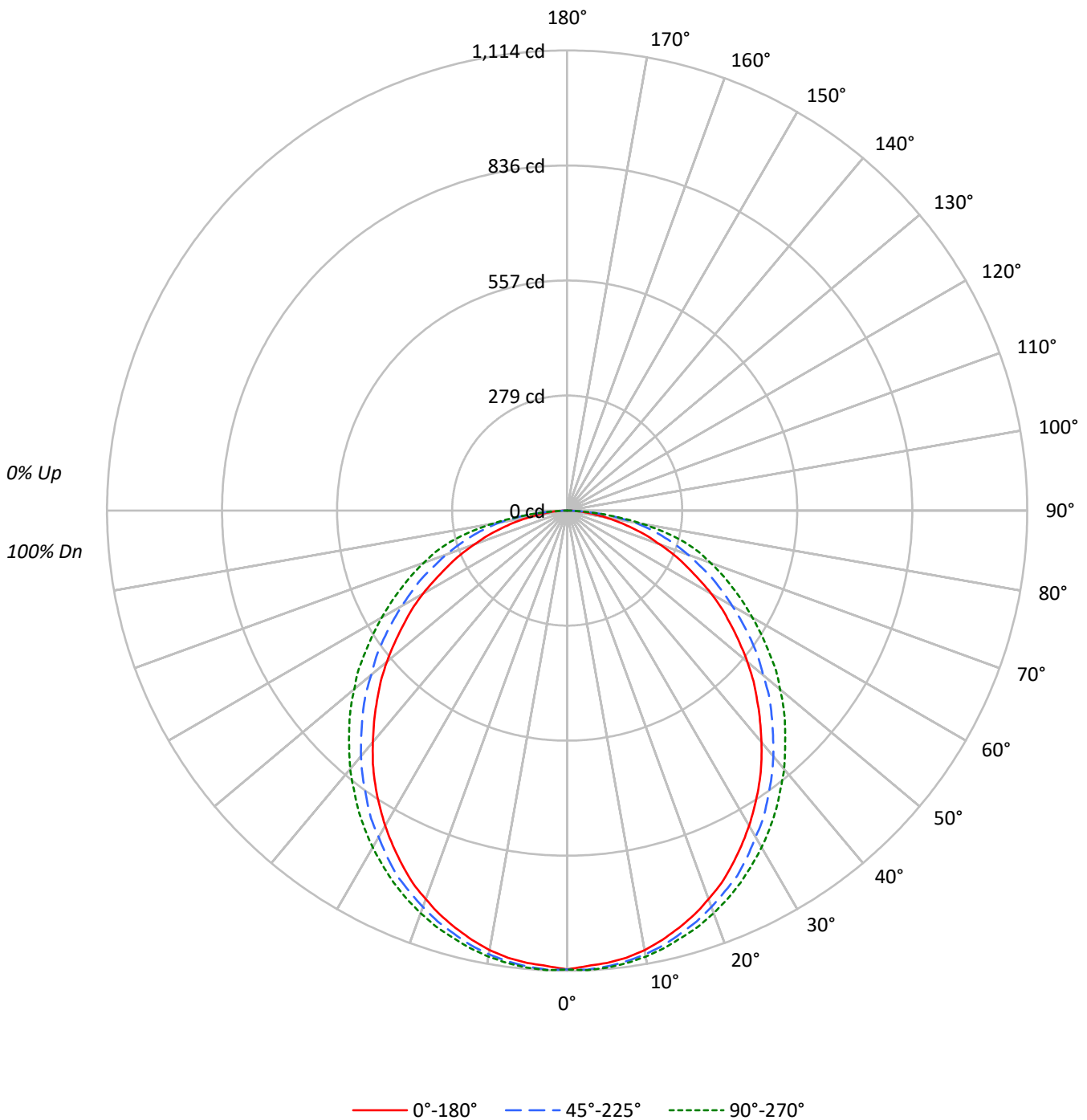
Input Watts (W): 26.335368
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2989	2989	2989
5°	2969	2993	3001
10°	2952	2980	2996
15°	2913	2954	2982
20°	2866	2924	2970
25°	2809	2895	2950
30°	2737	2836	2926
35°	2661	2784	2898
40°	2571	2728	2871
45°	2477	2664	2840
50°	2386	2592	2816
55°	2273	2545	2796
60°	2172	2483	2787
65°	2026	2468	2818
70°	1866	2447	2902
75°	1684	2482	3053
80°	1457	2555	2868
85°	1207	2143	2143



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	105.0	3.4
10°-20°	299.0	9.6
20°-30°	447.3	14.4
30°-40°	529.7	17.1
40°-50°	539.9	17.4
50°-60°	483.9	15.6
60°-70°	378.8	12.2
70°-80°	244.3	7.9
80°-90°	72.2	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°	851.3	27.5
0°-40°	1381.0	44.5
0°-60°	2404.7	77.6
0°-90°	3100.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3100.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1111	1111	1111	1111	1111	
5°	1099	1102	1108	1109	1111	104
15°	1046	1052	1060	1069	1070	295
25°	946	955	975	988	994	435
35°	810	820	848	874	882	506
45°	651	665	700	736	746	503
55°	484	500	542	580	596	434
65°	318	337	388	425	443	316
75°	162	187	239	279	294	174
85°	39	54	69	69	69	46
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1110.8	1110.8	1110.8	1110.8	1110.8
2.5°	1103.6	1106.5	1112.3	1113.7	1113.7
5°	1099.3	1102.1	1107.9	1109.4	1110.8
7.5°	1092.0	1093.5	1100.7	1103.6	1105.0
10°	1080.5	1083.3	1090.6	1094.9	1096.4
12.5°	1064.5	1068.9	1077.6	1083.3	1084.8
15°	1045.7	1051.5	1060.2	1068.9	1070.3
17.5°	1025.5	1031.3	1042.8	1053.0	1055.9
20°	1000.9	1008.1	1021.2	1032.7	1037.1
22.5°	976.3	982.1	998.0	1012.5	1016.8
25°	945.9	954.6	974.9	987.9	993.7
27.5°	914.1	924.2	944.5	961.8	967.6
30°	880.9	891.0	912.7	934.4	941.6
32.5°	846.1	857.7	883.7	905.4	912.7
35°	810.0	820.1	847.6	873.6	882.3
37.5°	772.4	781.0	812.9	840.4	849.0
40°	731.9	743.4	776.7	808.5	817.2
42.5°	691.4	704.4	737.7	772.4	781.0
45°	650.9	665.3	700.1	736.2	746.3
47.5°	611.8	623.4	662.4	697.2	711.6
50°	569.9	581.4	619.1	658.1	672.6
52.5°	526.5	542.4	582.9	620.5	637.9
55°	484.5	500.5	542.4	580.0	595.9
57.5°	445.5	458.5	501.9	540.9	556.9
60°	403.5	415.1	461.4	503.3	517.8
62.5°	358.7	376.1	423.8	462.8	480.2
65°	318.2	337.0	387.6	425.2	442.6
67.5°	280.6	298.0	347.1	387.6	406.4
70°	237.2	260.3	311.0	351.5	368.8
72.5°	202.5	222.7	274.8	315.3	334.1
75°	162.0	186.6	238.7	279.2	293.6
77.5°	128.7	153.3	202.5	234.3	241.5
80°	94.0	118.6	164.9	180.8	185.1
82.5°	63.6	86.8	118.6	122.9	124.4
85°	39.1	53.5	69.4	69.4	69.4
87.5°	18.8	21.7	24.6	23.1	23.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)