

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: P277404

Luminaire Tested: **22CZ2-29HE-S-UNV-L82765-W2A1-U-5500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P277404
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: 22CZ2-29HE-S-UNV-L82765-W2A1-U-5500K
Description: CRUZE 2.0 2x2 TUNABLE WHITE LED TROFFER WITH SMOOTH LENS
Light Source: (168) 80 CRI LEDS TUNED TO 5500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2913.0 lumens
Efficiency: N/A
Efficacy: 136.2 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

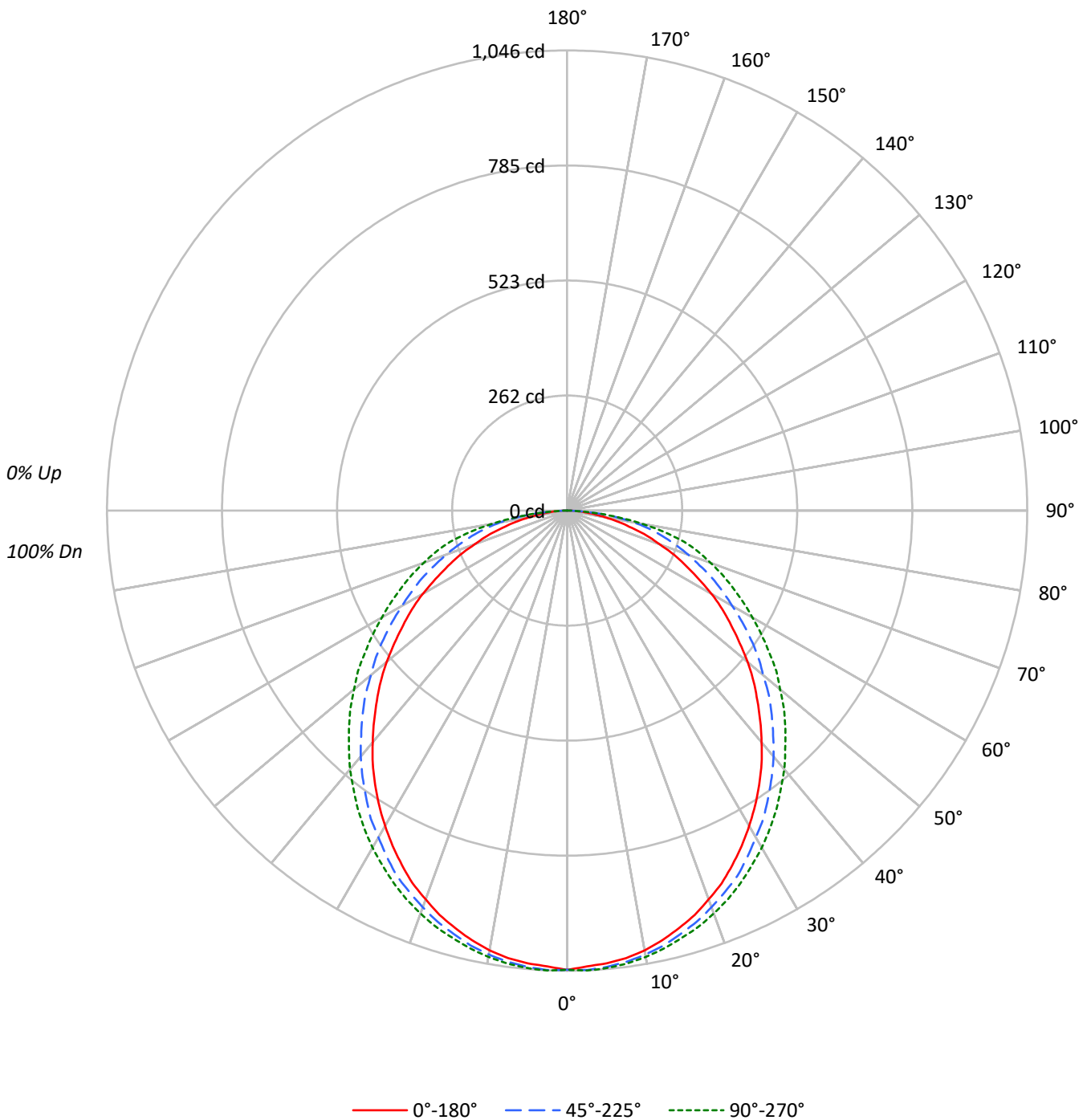
Input Watts (W): 21.39
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2809	2809	2809
5°	2790	2812	2820
10°	2774	2800	2815
15°	2738	2775	2802
20°	2693	2748	2791
25°	2639	2720	2772
30°	2572	2665	2749
35°	2500	2617	2724
40°	2416	2564	2697
45°	2328	2503	2669
50°	2242	2435	2646
55°	2136	2391	2627
60°	2041	2334	2619
65°	1904	2319	2648
70°	1754	2299	2727
75°	1582	2332	2869
80°	1368	2400	2696
85°	1133	2013	2013



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	98.7	3.4
10°-20°	280.9	9.6
20°-30°	420.3	14.4
30°-40°	497.8	17.1
40°-50°	507.3	17.4
50°-60°	454.7	15.6
60°-70°	356.0	12.2
70°-80°	229.5	7.9
80°-90°	67.8	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°	800.0	27.5
0°-40°	1297.7	44.5
0°-60°	2259.7	77.6
0°-90°	2913.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2913.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1044	1044	1044	1044	1044	
5°	1033	1036	1041	1042	1044	98
15°	983	988	996	1004	1006	277
25°	889	897	916	928	934	409
35°	761	771	796	821	829	476
45°	612	625	658	692	701	472
55°	455	470	510	545	560	408
65°	299	317	364	400	416	297
75°	152	175	224	262	276	163
85°	37	50	65	65	65	43
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1043.8	1043.8	1043.8	1043.8	1043.8
2.5°	1037.0	1039.7	1045.2	1046.5	1046.5
5°	1032.9	1035.7	1041.1	1042.5	1043.8
7.5°	1026.1	1027.5	1034.3	1037.0	1038.4
10°	1015.3	1018.0	1024.8	1028.9	1030.2
12.5°	1000.3	1004.4	1012.6	1018.0	1019.4
15°	982.7	988.1	996.2	1004.4	1005.8
17.5°	963.6	969.1	979.9	989.5	992.2
20°	940.5	947.3	959.6	970.4	974.5
22.5°	917.4	922.9	937.8	951.4	955.5
25°	888.9	897.0	916.1	928.3	933.7
27.5°	859.0	868.5	887.5	903.8	909.3
30°	827.7	837.2	857.6	878.0	884.8
32.5°	795.1	806.0	830.4	850.8	857.6
35°	761.1	770.6	796.5	820.9	829.1
37.5°	725.8	733.9	763.8	789.7	797.8
40°	687.7	698.6	729.9	759.8	767.9
42.5°	649.7	661.9	693.2	725.8	733.9
45°	611.6	625.2	657.8	691.8	701.3
47.5°	574.9	585.8	622.5	655.1	668.7
50°	535.5	546.4	581.7	618.4	632.0
52.5°	494.7	509.7	547.7	583.1	599.4
55°	455.3	470.3	509.7	545.0	560.0
57.5°	418.6	430.8	471.6	508.3	523.3
60°	379.2	390.1	433.6	473.0	486.6
62.5°	337.1	353.4	398.2	434.9	451.2
65°	299.0	316.7	364.2	399.6	415.9
67.5°	263.7	280.0	326.2	364.2	381.9
70°	222.9	244.6	292.2	330.3	346.6
72.5°	190.3	209.3	258.2	296.3	314.0
75°	152.2	175.3	224.3	262.3	275.9
77.5°	121.0	144.1	190.3	220.2	227.0
80°	88.3	111.4	154.9	169.9	174.0
82.5°	59.8	81.5	111.4	115.5	116.9
85°	36.7	50.3	65.2	65.2	65.2
87.5°	17.7	20.4	23.1	21.7	21.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)