

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: P277400

Luminaire Tested: **22CZ2-29HE-S-UNV-L82765-W2A1-U-3500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P277400
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-3500K
Description: CRUZE 2.0 2x2 TUNABLE WHITE LED TROFFER
WITH SMOOTH LENS
Light Source: (168) 80 CRI LEDS TUNED TO 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2736.0 lumens
Efficiency: N/A
Efficacy: 130.8 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

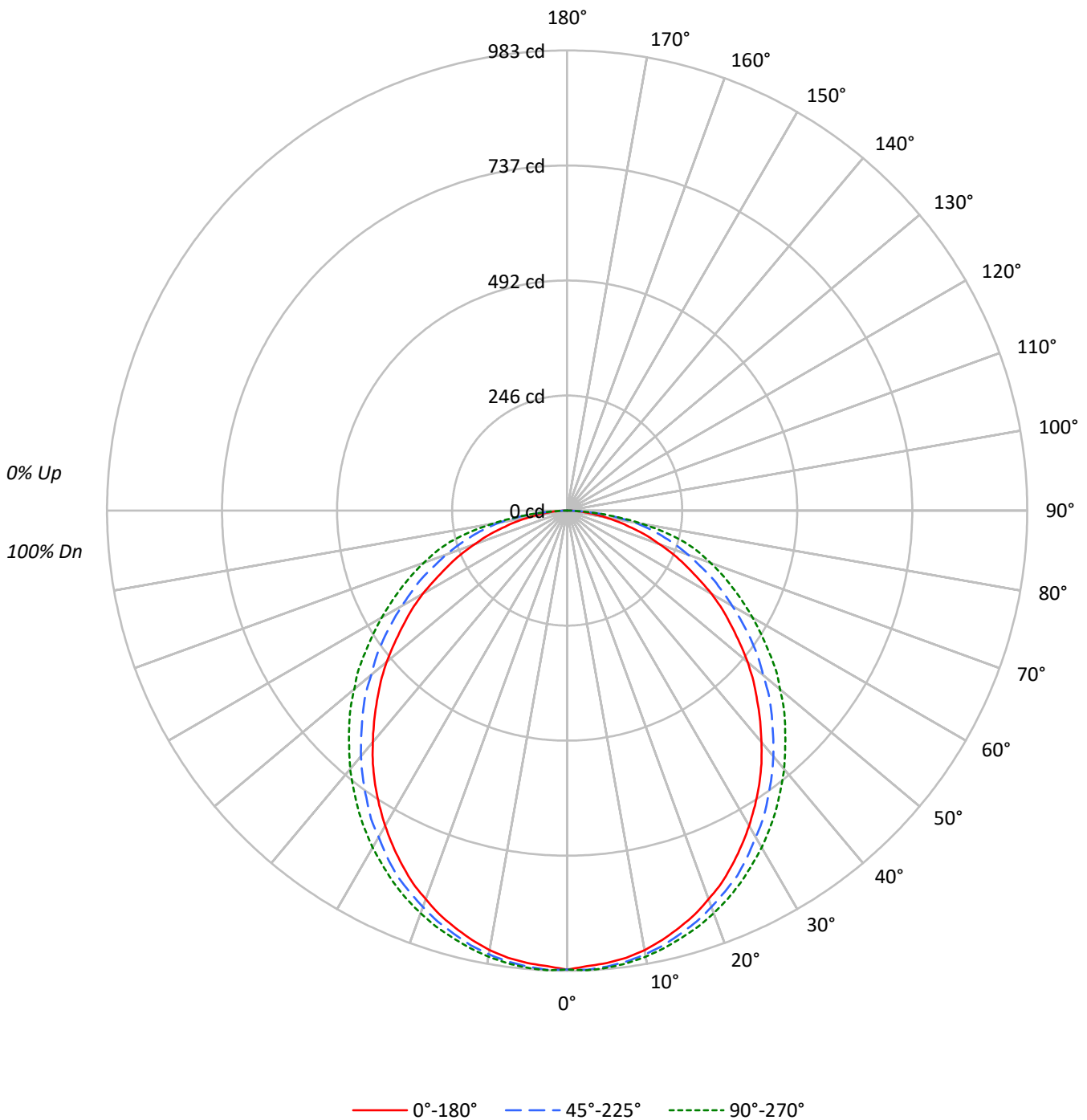
Input Watts (W): 20.925
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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					100			
1	108	103	99	95	106	101	97	94	97	94	91	93	90	88	89	87	85	83					83			
2	98	90	83	77	96	88	82	76	84	79	74	81	77	73	78	74	71	69					69			
3	90	79	71	64	87	77	70	63	74	68	62	72	66	61	69	64	60	58					58			
4	82	70	61	54	80	69	60	54	66	59	53	64	57	52	61	56	52	49					49			
5	75	62	53	47	73	61	53	46	59	52	46	57	51	45	55	50	45	43					43			
6	70	56	47	41	68	55	47	41	53	46	40	52	45	40	50	44	39	37					37			
7	65	51	42	36	63	50	42	36	49	41	36	47	40	35	46	40	35	33					33			
8	60	47	38	32	59	46	38	32	45	37	32	43	37	32	42	36	31	30					30			
9	56	43	35	29	55	42	34	29	41	34	29	40	33	29	39	33	28	27					27			
10	53	40	32	26	51	39	31	26	38	31	26	37	31	26	36	30	26	24					24			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2638	2638	2638
5°	2621	2641	2648
10°	2606	2630	2644
15°	2571	2607	2632
20°	2530	2581	2621
25°	2479	2555	2604
30°	2416	2503	2582
35°	2349	2458	2558
40°	2269	2408	2534
45°	2186	2351	2507
50°	2106	2287	2485
55°	2006	2246	2467
60°	1917	2192	2460
65°	1788	2178	2487
70°	1648	2160	2561
75°	1487	2190	2694
80°	1286	2255	2532
85°	1065	1893	1893



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	92.7	3.4
10°-20°	263.8	9.6
20°-30°	394.8	14.4
30°-40°	467.5	17.1
40°-50°	476.5	17.4
50°-60°	427.0	15.6
60°-70°	334.3	12.2
70°-80°	215.6	7.9
80°-90°	63.7	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°	751.3	27.5
0°-40°	1218.9	44.5
0°-60°	2122.4	77.6
0°-90°	2736.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2736.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	980	980	980	980	980	
5°	970	973	978	979	980	92
15°	923	928	936	943	945	260
25°	835	842	860	872	877	384
35°	715	724	748	771	779	447
45°	574	587	618	650	659	444
55°	428	442	479	512	526	383
65°	281	297	342	375	391	279
75°	143	165	211	246	259	153
85°	34	47	61	61	61	40
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	980.4	980.4	980.4	980.4	980.4
2.5°	974.0	976.6	981.7	982.9	982.9
5°	970.2	972.7	977.8	979.1	980.4
7.5°	963.8	965.1	971.5	974.0	975.3
10°	953.6	956.1	962.5	966.4	967.6
12.5°	939.5	943.4	951.0	956.1	957.4
15°	922.9	928.1	935.7	943.4	944.7
17.5°	905.1	910.2	920.4	929.3	931.9
20°	883.4	889.8	901.2	911.5	915.3
22.5°	861.7	866.8	880.8	893.6	897.4
25°	834.9	842.5	860.4	871.9	877.0
27.5°	806.8	815.7	833.6	848.9	854.0
30°	777.4	786.4	805.5	824.7	831.0
32.5°	746.8	757.0	780.0	799.1	805.5
35°	714.9	723.8	748.1	771.0	778.7
37.5°	681.7	689.3	717.4	741.7	749.3
40°	645.9	656.1	685.5	713.6	721.3
42.5°	610.2	621.7	651.0	681.7	689.3
45°	574.4	587.2	617.9	649.8	658.7
47.5°	540.0	550.2	584.7	615.3	628.1
50°	503.0	513.2	546.4	580.8	593.6
52.5°	464.7	478.7	514.5	547.6	563.0
55°	427.6	441.7	478.7	511.9	525.9
57.5°	393.2	404.7	443.0	477.4	491.5
60°	356.2	366.4	407.2	444.2	457.0
62.5°	316.6	331.9	374.0	408.5	423.8
65°	280.8	297.4	342.1	375.3	390.6
67.5°	247.7	263.0	306.4	342.1	358.7
70°	209.4	229.8	274.5	310.2	325.5
72.5°	178.7	196.6	242.5	278.3	294.9
75°	143.0	164.7	210.6	246.4	259.1
77.5°	113.6	135.3	178.7	206.8	213.2
80°	83.0	104.7	145.5	159.6	163.4
82.5°	56.2	76.6	104.7	108.5	109.8
85°	34.5	47.2	61.3	61.3	61.3
87.5°	16.6	19.1	21.7	20.4	20.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)