

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: P277188

Luminaire Tested: **22CZ2-24HE-UNV-L93050-W2A1-U-3500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P277188
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-27)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ2-24HE-UNV-L93050-W2A1-U-3500K
Description: CRUZE 2.0 2x2 TUNABLE WHITE LED TROFFER WITH RIBBED LENS
Light Source: (168) 90 CRI LEDS TUNED TO 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1931.0 lumens
Efficiency: N/A
Efficacy: 107.8 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.27 / 1.36
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

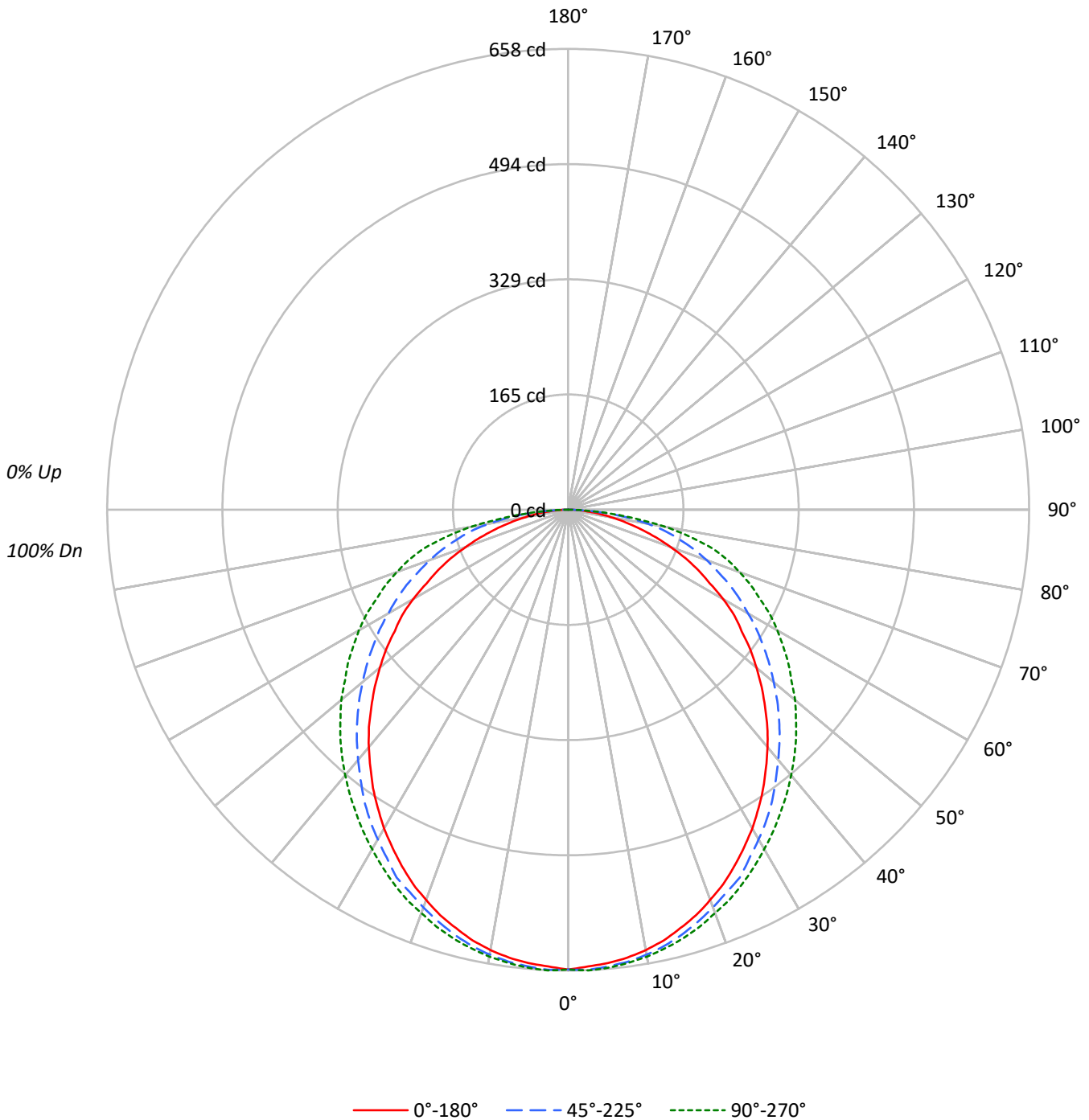
Input Watts (W): 17.910963
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	98	94	105	101	96	93	96	93	90	92	90	87	89	86	84	82
2	98	89	82	76	95	87	81	75	84	78	73	80	76	71	77	73	70	68
3	89	78	69	63	86	76	68	62	73	66	61	70	65	60	68	63	59	56
4	81	69	60	53	79	67	59	52	65	57	52	63	56	51	60	55	50	48
5	75	61	52	45	72	60	52	45	58	50	44	56	49	44	54	48	44	41
6	69	55	46	39	67	54	46	39	52	45	39	51	44	39	49	43	38	36
7	64	50	41	35	62	49	41	35	48	40	34	46	39	34	45	39	34	32
8	59	46	37	31	58	45	37	31	44	36	31	42	35	30	41	35	30	28
9	56	42	34	28	54	41	33	28	40	33	28	39	32	27	38	32	27	25
10	52	39	31	25	51	38	30	25	37	30	25	36	30	25	35	29	25	23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1767	1767	1767
5°	1756	1769	1774
10°	1745	1763	1771
15°	1723	1750	1766
20°	1698	1731	1755
25°	1667	1721	1749
30°	1633	1689	1739
35°	1595	1667	1736
40°	1555	1639	1739
45°	1512	1620	1750
50°	1468	1603	1770
55°	1418	1596	1801
60°	1376	1596	1856
65°	1307	1621	1924
70°	1219	1652	2048
75°	1117	1709	2213
80°	972	1782	2179
85°	852	1584	1732



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	62.1	3.2
10°-20°	176.9	9.2
20°-30°	265.5	13.7
30°-40°	317.3	16.4
40°-50°	329.9	17.1
50°-60°	305.8	15.8
60°-70°	250.8	13.0
70°-80°	169.5	8.8
80°-90°	53.3	2.8
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°	504.5	26.1
0°-40°	821.7	42.6
0°-60°	1457.4	75.5
0°-90°	1931.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1931.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	657	657	657	657	657	
5°	650	651	655	656	657	62
15°	619	621	628	632	634	174
25°	562	566	580	586	589	259
35°	486	492	507	523	528	303
45°	397	405	426	450	460	307
55°	302	312	340	371	384	272
65°	205	217	255	288	302	203
75°	107	125	164	198	213	114
85°	28	38	51	57	56	31
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	656.6	656.6	656.6	656.6	656.6
2.5°	652.8	654.7	657.5	658.5	658.5
5°	649.9	650.9	654.7	655.6	656.6
7.5°	645.2	647.1	650.9	651.8	652.8
10°	638.5	640.4	645.2	647.1	648.0
12.5°	630.0	631.9	637.6	640.4	641.4
15°	618.6	621.4	628.1	631.9	633.8
17.5°	607.2	610.0	616.7	622.4	624.3
20°	592.9	599.6	604.3	611.9	612.9
22.5°	578.7	582.5	591.0	598.6	602.4
25°	561.6	566.3	579.6	586.3	589.1
27.5°	543.5	550.2	560.6	571.1	574.9
30°	525.5	530.2	543.5	555.9	559.7
32.5°	505.5	512.1	526.4	538.8	544.5
35°	485.5	492.2	507.4	522.6	528.3
37.5°	463.7	471.3	486.5	504.5	512.1
40°	442.8	448.5	466.5	488.4	495.0
42.5°	420.9	427.6	446.6	470.3	477.9
45°	397.2	404.8	425.7	450.4	459.9
47.5°	374.4	382.0	404.8	429.5	440.9
50°	350.6	360.1	382.9	411.4	422.8
52.5°	327.8	336.4	362.0	391.5	401.9
55°	302.2	311.7	340.2	370.6	383.9
57.5°	281.3	287.9	319.3	350.6	363.9
60°	255.6	264.2	296.5	329.7	344.9
62.5°	228.0	242.3	275.6	309.8	325.0
65°	205.2	216.6	254.6	287.9	302.2
67.5°	181.5	193.8	230.9	266.1	282.2
70°	154.9	171.0	210.0	245.1	260.3
72.5°	131.1	148.2	188.1	222.3	238.5
75°	107.4	125.4	164.4	197.6	212.8
77.5°	84.6	104.5	142.5	168.2	177.7
80°	62.7	81.7	115.0	133.0	140.6
82.5°	43.7	59.9	84.6	94.1	96.0
85°	27.6	38.0	51.3	57.0	56.1
87.5°	12.4	15.2	19.0	20.9	20.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)