

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: P277184

Luminaire Tested: **22CZ2-20HE-UNV-L93050-W2A1-U-4000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P277184
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: 22CZ2-20HE-UNV-L93050-W2A1-U-4000K
Description: CRUZE 2.0 2x2 TUNABLE WHITE LED TROFFER
WITH RIBBED LENS
Light Source: (168) 90 CRI LEDS TUNED TO 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1848.0 lumens
Efficiency: N/A
Efficacy: 116.0 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

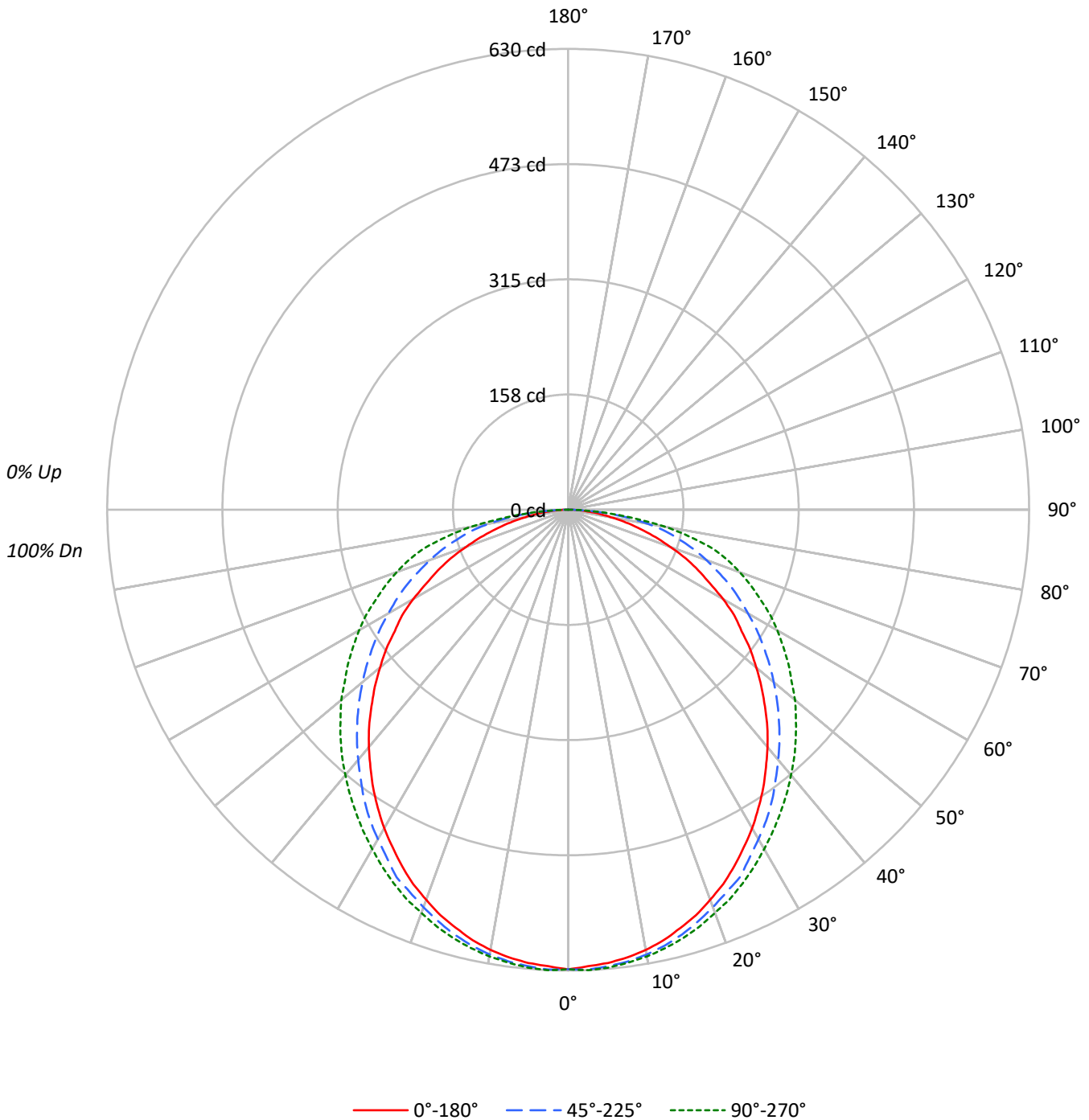
Input Watts (W): 15.934806
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1691	1691	1691
5°	1680	1692	1697
10°	1670	1687	1695
15°	1649	1675	1690
20°	1625	1656	1680
25°	1596	1647	1674
30°	1563	1616	1664
35°	1527	1595	1661
40°	1489	1568	1664
45°	1447	1550	1675
50°	1405	1534	1694
55°	1357	1527	1724
60°	1316	1527	1777
65°	1251	1552	1841
70°	1166	1581	1961
75°	1069	1635	2118
80°	930	1705	2086
85°	815	1516	1658



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	59.4	3.2
10°-20°	169.3	9.2
20°-30°	254.1	13.7
30°-40°	303.6	16.4
40°-50°	315.7	17.1
50°-60°	292.6	15.8
60°-70°	240.0	13.0
70°-80°	162.2	8.8
80°-90°	51.0	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°	482.8	26.1
0°-40°	786.4	42.6
0°-60°	1394.7	75.5
0°-90°	1848.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1848.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	628	628	628	628	628	
5°	622	623	626	627	628	59
15°	592	595	601	605	606	167
25°	537	542	555	561	564	247
35°	465	471	486	500	506	290
45°	380	387	407	431	440	294
55°	289	298	326	355	367	260
65°	196	207	244	276	289	194
75°	103	120	157	189	204	109
85°	26	36	49	55	54	30
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	628.4	628.4	628.4	628.4	628.4
2.5°	624.7	626.5	629.3	630.2	630.2
5°	622.0	622.9	626.5	627.4	628.4
7.5°	617.4	619.3	622.9	623.8	624.7
10°	611.1	612.9	617.4	619.3	620.2
12.5°	602.9	604.7	610.2	612.9	613.8
15°	592.0	594.7	601.1	604.7	606.5
17.5°	581.1	583.8	590.2	595.6	597.4
20°	567.4	573.8	578.3	585.6	586.5
22.5°	553.8	557.4	565.6	572.9	576.5
25°	537.4	542.0	554.7	561.1	563.8
27.5°	520.1	526.5	536.5	546.5	550.2
30°	502.9	507.4	520.1	532.0	535.6
32.5°	483.8	490.1	503.8	515.6	521.1
35°	464.7	471.0	485.6	500.1	505.6
37.5°	443.8	451.0	465.6	482.9	490.1
40°	423.8	429.2	446.5	467.4	473.8
42.5°	402.8	409.2	427.4	450.1	457.4
45°	380.1	387.4	407.4	431.0	440.1
47.5°	358.3	365.6	387.4	411.0	421.9
50°	335.5	344.6	366.5	393.7	404.7
52.5°	313.7	321.9	346.5	374.6	384.7
55°	289.2	298.3	325.5	354.6	367.4
57.5°	269.2	275.5	305.5	335.5	348.3
60°	244.6	252.8	283.7	315.5	330.1
62.5°	218.2	231.9	263.7	296.4	311.0
65°	196.4	207.3	243.7	275.5	289.2
67.5°	173.7	185.5	221.0	254.6	270.1
70°	148.2	163.7	201.0	234.6	249.2
72.5°	125.5	141.9	180.0	212.8	228.2
75°	102.8	120.0	157.3	189.1	203.7
77.5°	80.9	100.0	136.4	161.0	170.0
80°	60.0	78.2	110.0	127.3	134.6
82.5°	41.8	57.3	80.9	90.0	91.8
85°	26.4	36.4	49.1	54.6	53.7
87.5°	11.8	14.5	18.2	20.0	19.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)