

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: P277213

Luminaire Tested: **22CZ2-20HE-UNV-L82765-W2A1-U-3000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P277213
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-L82765-W2A1-U-3000K
Description: CRUZE 2.0 2x2 TUNABLE WHITE LED TROFFER
WITH RIBBED LENS
Light Source: (168) 80 CRI LEDS TUNED TO 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1900.0 lumens
Efficiency: N/A
Efficacy: 123.1 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

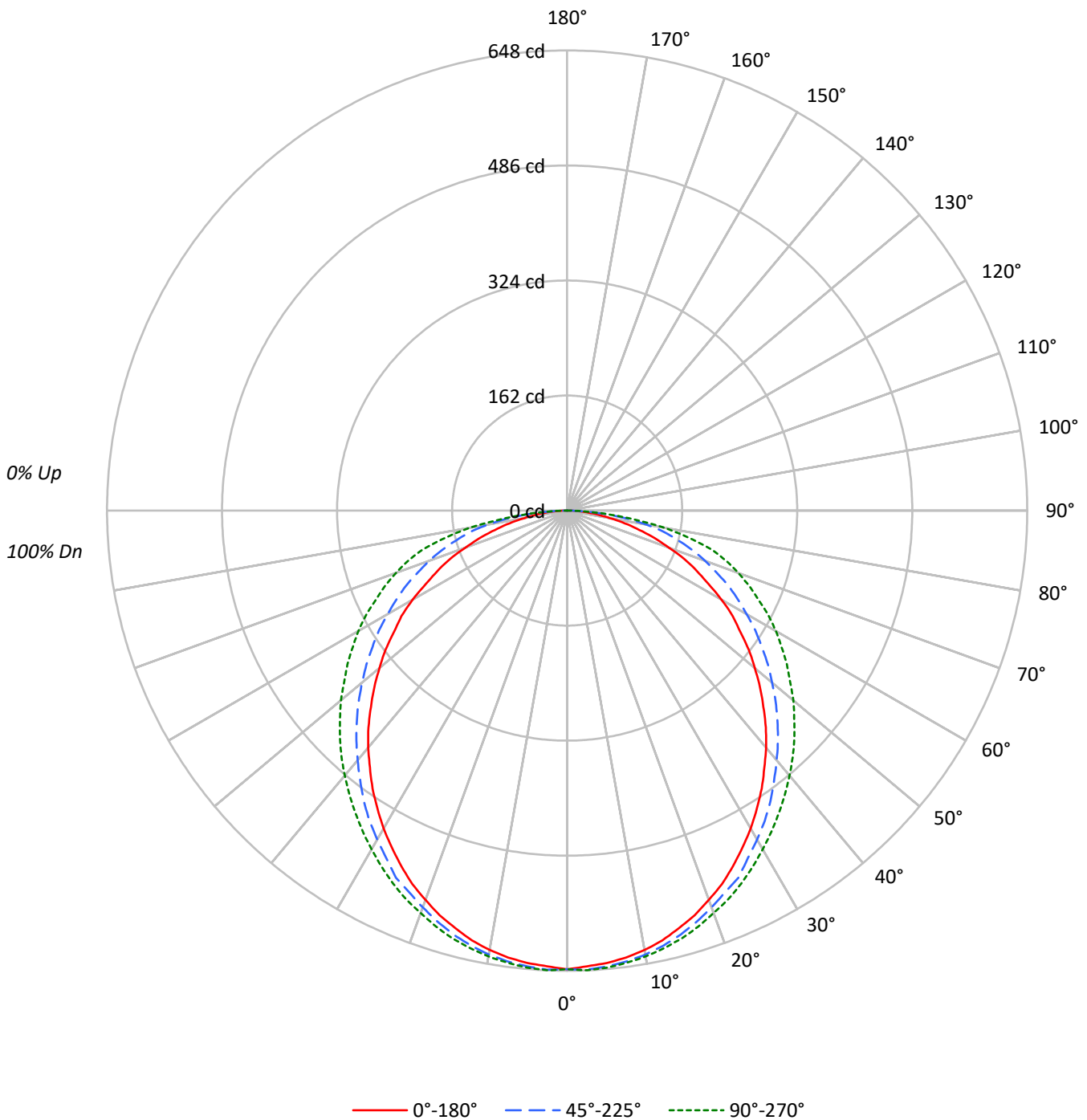
Input Watts (W): 15.438
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1738	1738	1738
5°	1727	1740	1745
10°	1717	1735	1742
15°	1696	1722	1737
20°	1671	1703	1727
25°	1640	1693	1721
30°	1606	1662	1711
35°	1569	1640	1708
40°	1531	1612	1711
45°	1487	1594	1722
50°	1444	1577	1742
55°	1395	1570	1772
60°	1354	1570	1827
65°	1286	1596	1893
70°	1199	1626	2016
75°	1098	1681	2177
80°	956	1753	2145
85°	837	1559	1704



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	61.1	3.2
10°-20°	174.0	9.2
20°-30°	261.2	13.7
30°-40°	312.2	16.4
40°-50°	324.6	17.1
50°-60°	300.9	15.8
60°-70°	246.8	13.0
70°-80°	166.8	8.8
80°-90°	52.4	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°	496.4	26.1
0°-40°	808.5	42.6
0°-60°	1434.0	75.5
0°-90°	1900.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1900.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	646	646	646	646	646	
5°	640	640	644	645	646	61
15°	609	611	618	622	624	172
25°	552	557	570	577	580	254
35°	478	484	499	514	520	299
45°	391	398	419	443	452	302
55°	297	307	335	365	378	267
65°	202	213	251	283	297	200
75°	106	123	162	194	209	112
85°	27	37	50	56	55	31
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	646.0	646.0	646.0	646.0	646.0
2.5°	642.3	644.2	647.0	647.9	647.9
5°	639.5	640.4	644.2	645.1	646.0
7.5°	634.8	636.7	640.4	641.4	642.3
10°	628.3	630.1	634.8	636.7	637.6
12.5°	619.9	621.7	627.3	630.1	631.1
15°	608.6	611.4	618.0	621.7	623.6
17.5°	597.4	600.2	606.8	612.4	614.2
20°	583.4	589.9	594.6	602.1	603.0
22.5°	569.4	573.1	581.5	589.0	592.7
25°	552.5	557.2	570.3	576.9	579.7
27.5°	534.8	541.3	551.6	561.9	565.6
30°	517.0	521.7	534.8	546.9	550.7
32.5°	497.4	503.9	517.9	530.1	535.7
35°	477.7	484.3	499.3	514.2	519.8
37.5°	456.2	463.7	478.7	496.4	503.9
40°	435.7	441.3	459.0	480.6	487.1
42.5°	414.2	420.7	439.4	462.8	470.3
45°	390.8	398.3	418.8	443.2	452.5
47.5°	368.4	375.8	398.3	422.6	433.8
50°	345.0	354.3	376.8	404.8	416.0
52.5°	322.6	331.0	356.2	385.2	395.5
55°	297.3	306.7	334.7	364.6	377.7
57.5°	276.7	283.3	314.1	345.0	358.1
60°	251.5	259.9	291.7	324.4	339.4
62.5°	224.4	238.4	271.1	304.8	319.7
65°	201.9	213.2	250.6	283.3	297.3
67.5°	178.6	190.7	227.2	261.8	277.7
70°	152.4	168.3	206.6	241.2	256.2
72.5°	129.0	145.8	185.1	218.8	234.7
75°	105.6	123.4	161.7	194.5	209.4
77.5°	83.2	102.8	140.2	165.5	174.8
80°	61.7	80.4	113.1	130.9	138.4
82.5°	43.0	58.9	83.2	92.6	94.4
85°	27.1	37.4	50.5	56.1	55.2
87.5°	12.2	15.0	18.7	20.6	19.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)