

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: P277435

Luminaire Tested: **22CZ2-20HE-S-UNV-L92765-W2A1-U-3000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P277435
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: 22CZ2-20HE-S-UNV-L92765-W2A1-U-3000K
Description: CRUZE 2.0 2x2 TUNABLE WHITE LED TROFFER WITH SMOOTH LENS
Light Source: (168) 90 CRI LEDS TUNED TO 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1730.0 lumens
Efficiency: N/A
Efficacy: 112.7 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

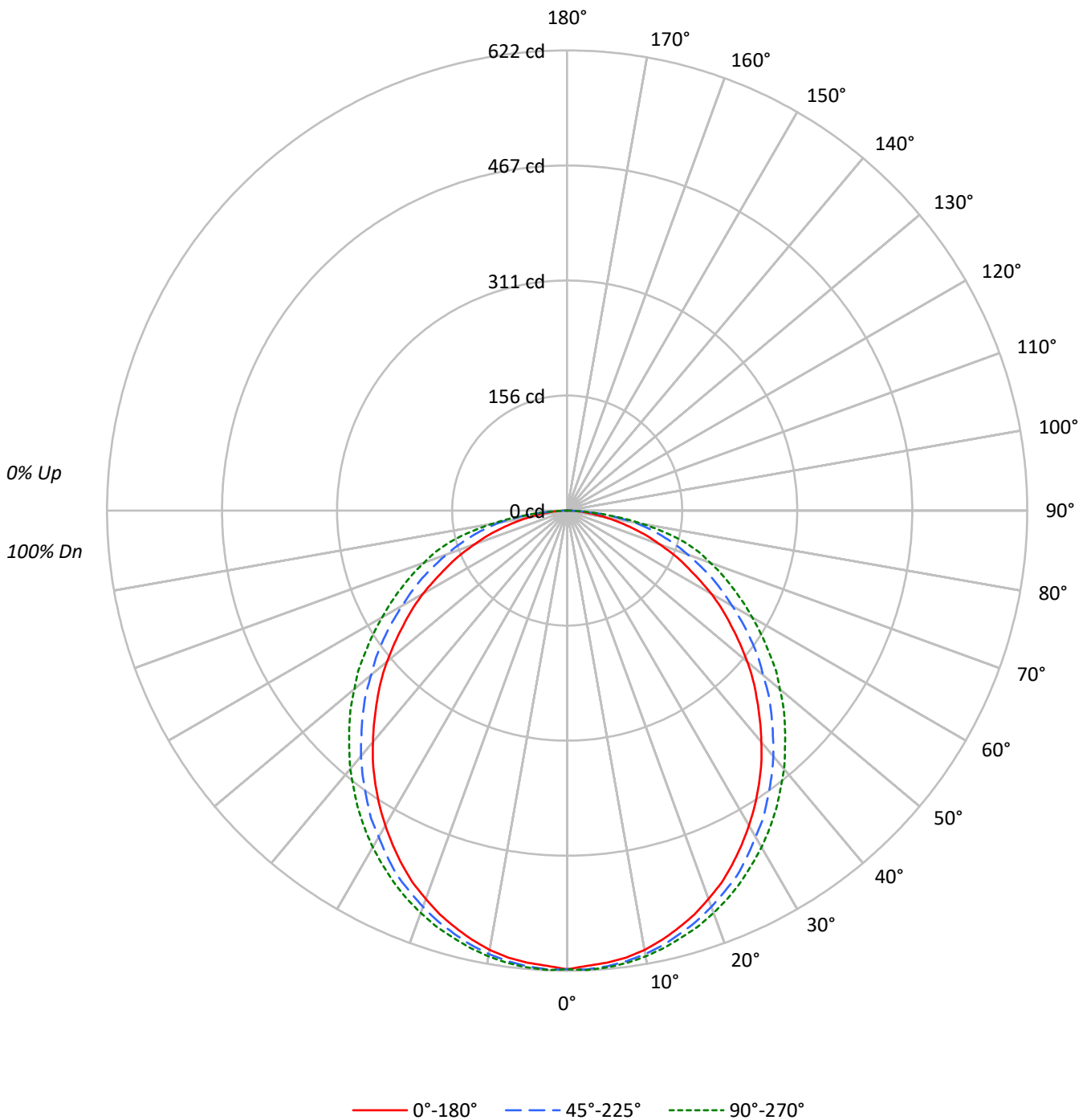
Input Watts (W): 15.345
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1668	1668	1668
5°	1657	1670	1675
10°	1648	1663	1672
15°	1626	1648	1664
20°	1600	1632	1657
25°	1567	1615	1646
30°	1528	1583	1633
35°	1485	1554	1618
40°	1435	1523	1602
45°	1382	1487	1585
50°	1331	1446	1571
55°	1269	1420	1560
60°	1212	1386	1555
65°	1131	1377	1573
70°	1042	1365	1619
75°	940	1385	1704
80°	814	1426	1601
85°	673	1195	1195



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	58.6	3.4
10°-20°	166.8	9.6
20°-30°	249.6	14.4
30°-40°	295.6	17.1
40°-50°	301.3	17.4
50°-60°	270.0	15.6
60°-70°	211.4	12.2
70°-80°	136.3	7.9
80°-90°	40.3	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°	475.1	27.5
0°-40°	770.7	44.5
0°-60°	1342.0	77.6
0°-90°	1730.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1730.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	620	620	620	620	620	
5°	614	615	618	619	620	58
15°	584	587	592	596	597	165
25°	528	533	544	551	554	243
35°	452	458	473	488	492	282
45°	363	371	391	411	416	280
55°	270	279	303	324	333	242
65°	178	188	216	237	247	176
75°	90	104	133	156	164	97
85°	22	30	39	39	39	26
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	619.9	619.9	619.9	619.9	619.9
2.5°	615.9	617.5	620.7	621.5	621.5
5°	613.5	615.1	618.3	619.1	619.9
7.5°	609.4	610.2	614.3	615.9	616.7
10°	603.0	604.6	608.6	611.0	611.8
12.5°	594.1	596.5	601.3	604.6	605.4
15°	583.6	586.8	591.7	596.5	597.3
17.5°	572.3	575.5	582.0	587.6	589.2
20°	558.6	562.6	569.9	576.3	578.7
22.5°	544.8	548.1	557.0	565.0	567.4
25°	527.9	532.7	544.0	551.3	554.5
27.5°	510.1	515.8	527.1	536.8	540.0
30°	491.6	497.2	509.3	521.4	525.5
32.5°	472.2	478.7	493.2	505.3	509.3
35°	452.0	457.7	473.0	487.5	492.4
37.5°	431.0	435.9	453.6	469.0	473.8
40°	408.4	414.9	433.5	451.2	456.1
42.5°	385.8	393.1	411.7	431.0	435.9
45°	363.2	371.3	390.7	410.9	416.5
47.5°	341.4	347.9	369.7	389.1	397.1
50°	318.0	324.5	345.5	367.3	375.3
52.5°	293.8	302.7	325.3	346.3	356.0
55°	270.4	279.3	302.7	323.7	332.6
57.5°	248.6	255.9	280.1	301.9	310.8
60°	225.2	231.7	257.5	280.9	289.0
62.5°	200.2	209.9	236.5	258.3	268.0
65°	177.6	188.1	216.3	237.3	247.0
67.5°	156.6	166.3	193.7	216.3	226.8
70°	132.4	145.3	173.5	196.1	205.8
72.5°	113.0	124.3	153.4	176.0	186.5
75°	90.4	104.1	133.2	155.8	163.9
77.5°	71.8	85.6	113.0	130.8	134.8
80°	52.5	66.2	92.0	100.9	103.3
82.5°	35.5	48.4	66.2	68.6	69.4
85°	21.8	29.9	38.7	38.7	38.7
87.5°	10.5	12.1	13.7	12.9	12.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)