

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: P277434

Luminaire Tested: **22CZ2-20HE-S-UNV-L92765-W2A1-U-2700K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P277434
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-2700K
Description: CRUZE 2.0 2x2 TUNABLE WHITE LED TROFFER WITH SMOOTH LENS
Light Source: (168) 90 CRI LEDS TUNED TO 2700K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1664.0 lumens
Efficiency: N/A
Efficacy: 107.1 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

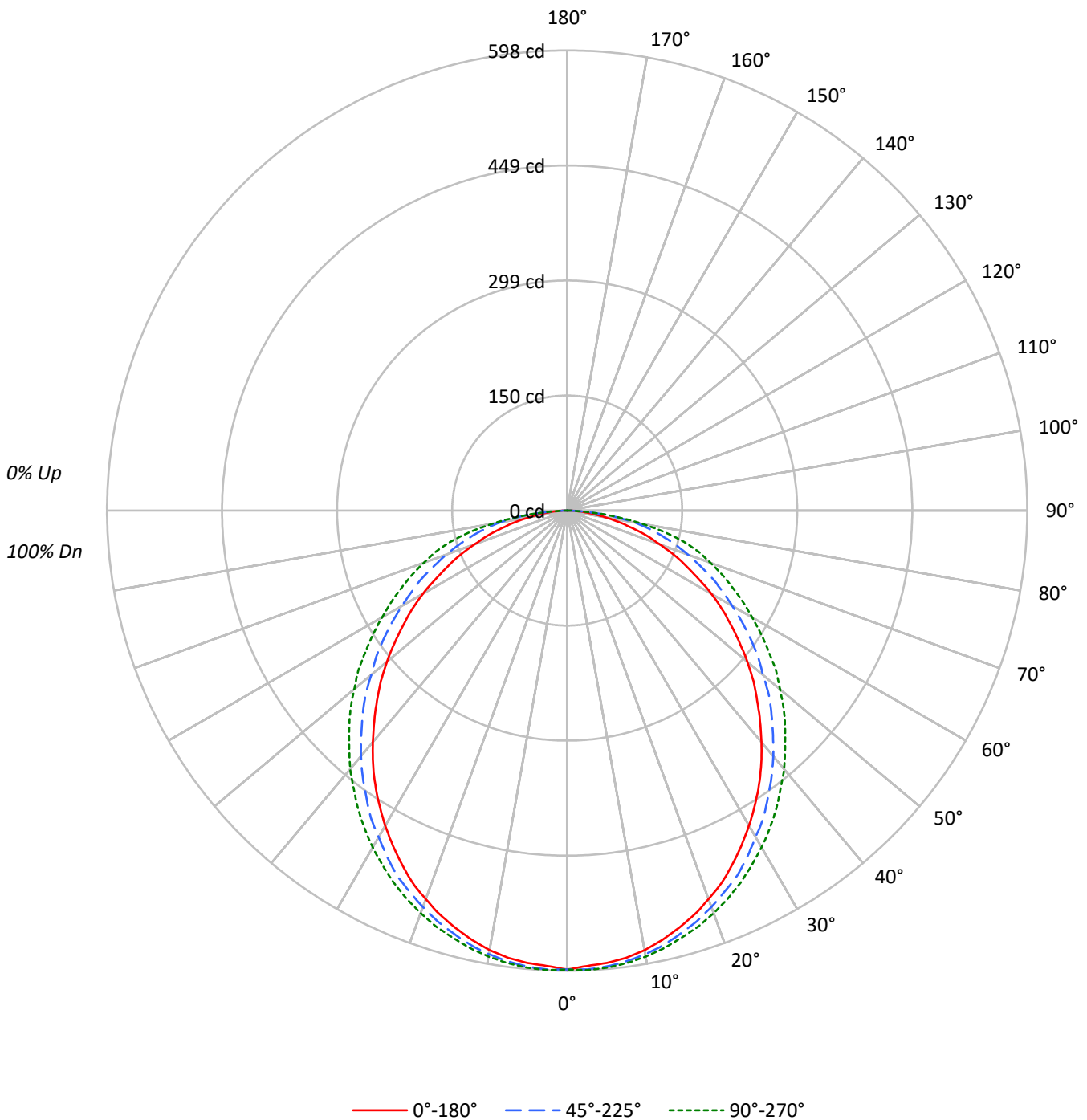
Input Watts (W): 15.531
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1605	1605	1605
5°	1594	1606	1611
10°	1585	1600	1608
15°	1564	1585	1601
20°	1539	1570	1594
25°	1508	1554	1584
30°	1469	1522	1570
35°	1428	1495	1556
40°	1380	1464	1541
45°	1330	1430	1525
50°	1281	1391	1511
55°	1220	1366	1501
60°	1166	1333	1496
65°	1088	1325	1513
70°	1002	1313	1558
75°	905	1332	1639
80°	783	1371	1540
85°	648	1152	1152



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	56.4	3.4
10°-20°	160.5	9.6
20°-30°	240.1	14.4
30°-40°	284.3	17.1
40°-50°	289.8	17.4
50°-60°	259.7	15.6
60°-70°	203.3	12.2
70°-80°	131.1	7.9
80°-90°	38.7	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°	457.0	27.5
0°-40°	741.3	44.5
0°-60°	1290.8	77.6
0°-90°	1664.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1664.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	596	596	596	596	596	
5°	590	592	595	596	596	56
15°	561	564	569	574	574	158
25°	508	512	523	530	533	234
35°	435	440	455	469	474	272
45°	349	357	376	395	401	270
55°	260	269	291	311	320	233
65°	171	181	208	228	238	170
75°	87	100	128	150	158	93
85°	21	29	37	37	37	25
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	596.3	596.3	596.3	596.3	596.3
2.5°	592.4	593.9	597.0	597.8	597.8
5°	590.1	591.6	594.7	595.5	596.3
7.5°	586.2	586.9	590.8	592.4	593.2
10°	580.0	581.5	585.4	587.7	588.5
12.5°	571.4	573.7	578.4	581.5	582.3
15°	561.3	564.4	569.1	573.7	574.5
17.5°	550.5	553.6	559.8	565.2	566.8
20°	537.3	541.1	548.1	554.3	556.7
22.5°	524.1	527.2	535.7	543.5	545.8
25°	507.8	512.4	523.3	530.3	533.4
27.5°	490.7	496.1	507.0	516.3	519.4
30°	472.8	478.3	489.9	501.5	505.4
32.5°	454.2	460.4	474.4	486.0	489.9
35°	434.8	440.2	455.0	468.9	473.6
37.5°	414.6	419.2	436.3	451.1	455.7
40°	392.9	399.1	416.9	434.0	438.7
42.5°	371.1	378.1	396.0	414.6	419.2
45°	349.4	357.1	375.8	395.2	400.6
47.5°	328.4	334.6	355.6	374.2	382.0
50°	305.9	312.1	332.3	353.3	361.0
52.5°	282.6	291.1	312.9	333.1	342.4
55°	260.1	268.6	291.1	311.3	319.9
57.5°	239.1	246.1	269.4	290.4	298.9
60°	216.6	222.8	247.7	270.2	277.9
62.5°	192.5	201.9	227.5	248.4	257.8
65°	170.8	180.9	208.1	228.3	237.6
67.5°	150.6	159.9	186.3	208.1	218.2
70°	127.3	139.7	166.9	188.7	198.0
72.5°	108.7	119.6	147.5	169.3	179.3
75°	87.0	100.2	128.1	149.8	157.6
77.5°	69.1	82.3	108.7	125.8	129.7
80°	50.5	63.7	88.5	97.0	99.4
82.5°	34.2	46.6	63.7	66.0	66.8
85°	21.0	28.7	37.3	37.3	37.3
87.5°	10.1	11.6	13.2	12.4	12.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)