

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: P277437

Luminaire Tested: **22CZ2-20HE-S-UNV-L92765-W2A1-U-4000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P277437
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-4000K
Description: CRUZE 2.0 2x2 TUNABLE WHITE LED TROFFER
WITH SMOOTH LENS
Light Source: (168) 90 CRI LEDS TUNED TO 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1875.0 lumens
Efficiency: N/A
Efficacy: 119.3 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

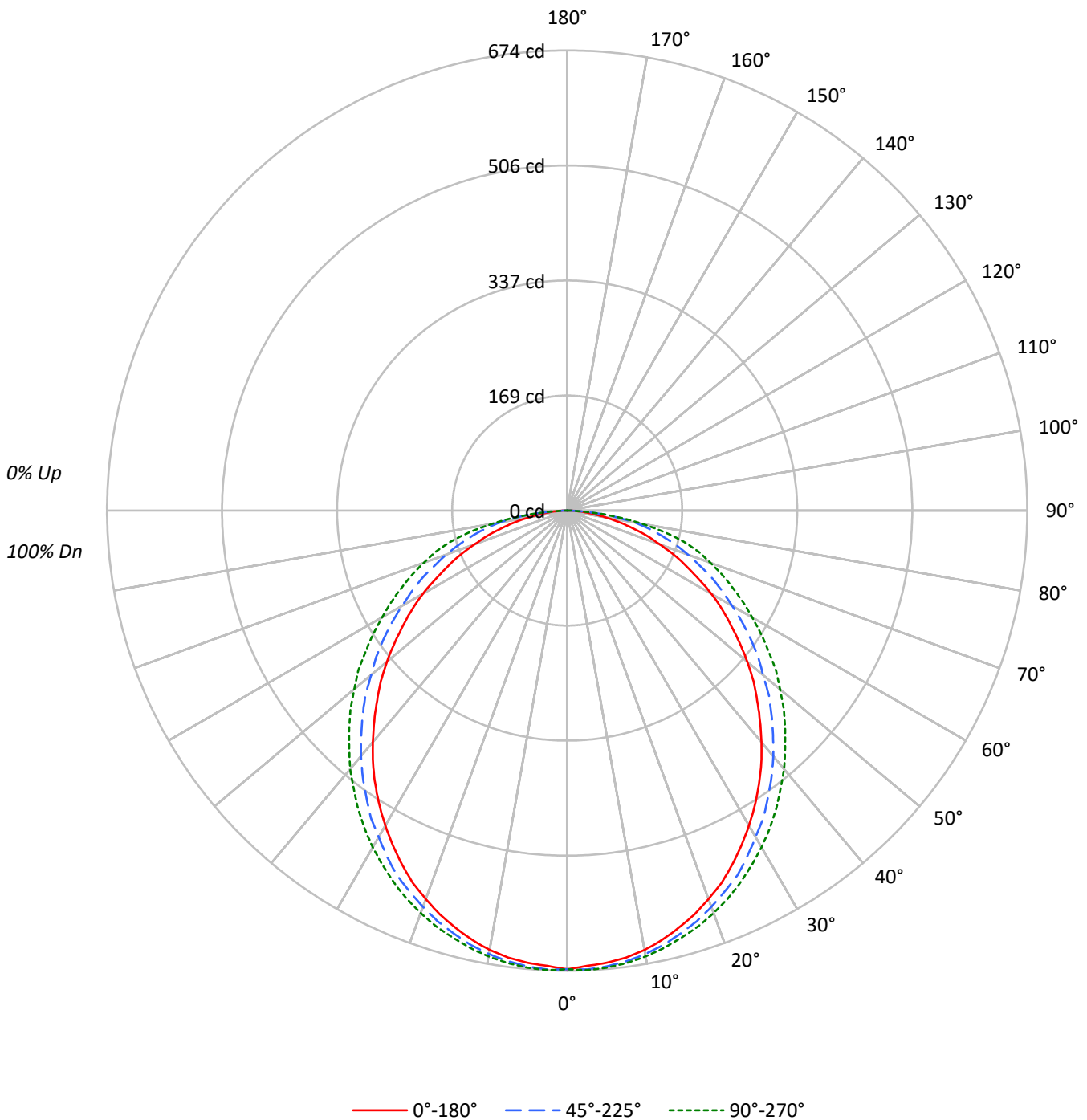
Input Watts (W): 15.717
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P277437

CATALOG NUMBER: 22CZ2-20HE-S-UNV-L92765-W2A1-U-4000K

Luminous Intensity Polar Plot





TEST NUMBER: P277437

CATALOG NUMBER: 22CZ2-20HE-S-UNV-L92765-W2A1-U-4000K

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°	1808	1808	1808
5°	1796	1810	1815
10°	1786	1802	1812
15°	1762	1787	1804
20°	1734	1769	1796
25°	1699	1751	1784
30°	1656	1715	1770
35°	1609	1684	1753
40°	1555	1650	1736
45°	1498	1611	1718
50°	1443	1567	1703
55°	1375	1539	1691
60°	1314	1502	1686
65°	1226	1493	1705
70°	1129	1480	1755
75°	1019	1500	1847
80°	882	1545	1736
85°	729	1297	1297



TEST NUMBER: P277437

CATALOG NUMBER: 22CZ2-20HE-S-UNV-L92765-W2A1-U-4000K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	63.5	3.4
10°-20°	180.8	9.6
20°-30°	270.5	14.4
30°-40°	320.4	17.1
40°-50°	326.5	17.4
50°-60°	292.7	15.6
60°-70°	229.1	12.2
70°-80°	147.7	7.9
80°-90°	43.7	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°	514.9	27.5
0°-40°	835.3	44.5
0°-60°	1454.5	77.6
0°-90°	1875.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1875.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	672	672	672	672	672	
5°	665	667	670	671	672	63
15°	632	636	641	646	647	178
25°	572	577	590	598	601	263
35°	490	496	513	528	534	306
45°	394	402	423	445	451	304
55°	293	303	328	351	360	263
65°	192	204	234	257	268	191
75°	98	113	144	169	178	105
85°	24	32	42	42	42	28
90°	0	0	0	0	0	



TEST NUMBER: P277437

CATALOG NUMBER: 22CZ2-20HE-S-UNV-L92765-W2A1-U-4000K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	671.9	671.9	671.9	671.9	671.9
2.5°	667.5	669.2	672.7	673.6	673.6
5°	664.9	666.6	670.1	671.0	671.9
7.5°	660.5	661.4	665.7	667.5	668.4
10°	653.5	655.2	659.6	662.2	663.1
12.5°	643.9	646.5	651.7	655.2	656.1
15°	632.5	636.0	641.3	646.5	647.4
17.5°	620.3	623.8	630.8	636.9	638.6
20°	605.4	609.8	617.6	624.6	627.3
22.5°	590.5	594.0	603.6	612.4	615.0
25°	572.1	577.4	589.6	597.5	601.0
27.5°	552.9	559.0	571.3	581.8	585.3
30°	532.8	538.9	552.0	565.1	569.5
32.5°	511.8	518.8	534.5	547.6	552.0
35°	489.9	496.0	512.7	528.4	533.6
37.5°	467.2	472.4	491.7	508.3	513.5
40°	442.7	449.7	469.8	489.0	494.3
42.5°	418.2	426.0	446.2	467.2	472.4
45°	393.7	402.4	423.4	445.3	451.4
47.5°	370.1	377.1	400.7	421.7	430.4
50°	344.7	351.7	374.4	398.0	406.8
52.5°	318.4	328.1	352.6	375.3	385.8
55°	293.1	302.7	328.1	350.8	360.4
57.5°	269.4	277.3	303.6	327.2	336.8
60°	244.1	251.1	279.1	304.4	313.2
62.5°	217.0	227.5	256.3	279.9	290.4
65°	192.5	203.8	234.5	257.2	267.7
67.5°	169.7	180.2	210.0	234.5	245.8
70°	143.5	157.5	188.1	212.6	223.1
72.5°	122.5	134.7	166.2	190.7	202.1
75°	98.0	112.9	144.3	168.8	177.6
77.5°	77.9	92.7	122.5	141.7	146.1
80°	56.9	71.7	99.7	109.4	112.0
82.5°	38.5	52.5	71.7	74.4	75.2
85°	23.6	32.4	42.0	42.0	42.0
87.5°	11.4	13.1	14.9	14.0	14.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)