

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: P277269

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P277269
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-L92765-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: 1778.0 lumens
Efficiency: N/A
Efficacy: 113.1 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

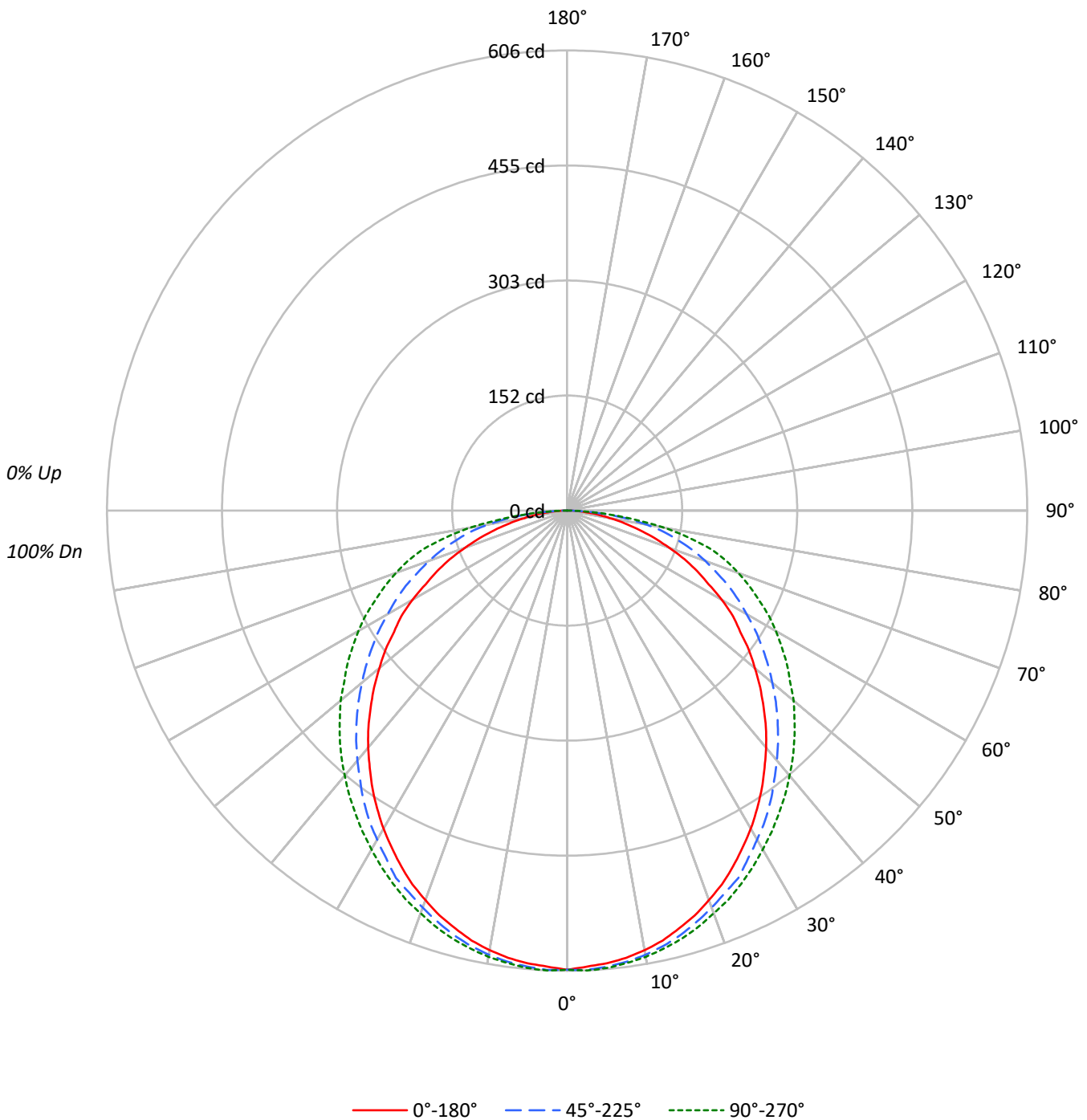
Input Watts (W): 15.717
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P277269

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

Luminous Intensity Polar Plot





TEST NUMBER: P277269

CATALOG NUMBER: 22CZ2-20HE-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	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°	1627	1627	1627
5°	1616	1628	1633
10°	1606	1623	1630
15°	1587	1611	1626
20°	1563	1593	1616
25°	1535	1585	1610
30°	1503	1555	1601
35°	1469	1535	1598
40°	1432	1509	1601
45°	1392	1492	1611
50°	1351	1476	1630
55°	1305	1469	1658
60°	1266	1469	1709
65°	1203	1493	1771
70°	1122	1522	1886
75°	1028	1574	2038
80°	894	1641	2007
85°	784	1457	1593



TEST NUMBER: P277269

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

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	57.2	3.2
10°-20°	162.9	9.2
20°-30°	244.5	13.7
30°-40°	292.1	16.4
40°-50°	303.8	17.1
50°-60°	281.5	15.8
60°-70°	230.9	13.0
70°-80°	156.1	8.8
80°-90°	49.1	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°	464.5	26.1
0°-40°	756.6	42.6
0°-60°	1341.9	75.5
0°-90°	1778.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1778.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	605	605	605	605	605	
5°	598	599	603	604	605	57
15°	570	572	578	582	584	161
25°	517	521	534	540	542	238
35°	447	453	467	481	486	279
45°	366	373	392	415	423	282
55°	278	287	313	341	354	250
65°	189	200	234	265	278	187
75°	99	116	151	182	196	105
85°	25	35	47	52	52	29
90°	0	0	0	0	0	



TEST NUMBER: P277269

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

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	604.6	604.6	604.6	604.6	604.6
2.5°	601.1	602.8	605.4	606.3	606.3
5°	598.4	599.3	602.8	603.7	604.6
7.5°	594.1	595.8	599.3	600.2	601.1
10°	587.9	589.7	594.1	595.8	596.7
12.5°	580.1	581.8	587.1	589.7	590.6
15°	569.6	572.2	578.3	581.8	583.6
17.5°	559.1	561.7	567.8	573.1	574.8
20°	545.9	552.1	556.4	563.4	564.3
22.5°	532.8	536.3	544.2	551.2	554.7
25°	517.1	521.4	533.7	539.8	542.4
27.5°	500.4	506.6	516.2	525.8	529.3
30°	483.8	488.2	500.4	511.8	515.3
32.5°	465.4	471.6	484.7	496.1	501.3
35°	447.1	453.2	467.2	481.2	486.4
37.5°	426.9	433.9	447.9	464.6	471.6
40°	407.7	413.0	429.6	449.7	455.8
42.5°	387.6	393.7	411.2	433.1	440.1
45°	365.7	372.7	392.0	414.7	423.4
47.5°	344.7	351.7	372.7	395.5	406.0
50°	322.8	331.6	352.6	378.8	389.3
52.5°	301.8	309.7	333.3	360.5	370.1
55°	278.2	287.0	313.2	341.2	353.5
57.5°	259.0	265.1	294.0	322.8	335.1
60°	235.3	243.2	273.0	303.6	317.6
62.5°	210.0	223.1	253.7	285.2	299.2
65°	189.0	199.5	234.5	265.1	278.2
67.5°	167.1	178.5	212.6	245.0	259.8
70°	142.6	157.5	193.4	225.7	239.7
72.5°	120.7	136.5	173.2	204.7	219.6
75°	98.9	115.5	151.4	182.0	196.0
77.5°	77.9	96.2	131.2	154.9	163.6
80°	57.7	75.2	105.9	122.5	129.5
82.5°	40.2	55.1	77.9	86.6	88.4
85°	25.4	35.0	47.2	52.5	51.6
87.5°	11.4	14.0	17.5	19.2	18.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)