

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: P277568

Luminaire Tested: **22CZ2-29HE-RDP-UNV-L82765-W2A1-U-3500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P277568  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-24)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 22CZ2-29HE-RDP-UNV-L82765-W2A1-U-3500K  
Description: CRUZE 2.0 2x2 TUNABLE WHITE LED TROFFER WITH RDP LENS  
Light Source: (168) 80 CRI LEDS TUNED TO 3500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1737.0 lumens  
Efficiency: N/A  
Efficacy: 83.0 lumens/watt  
Spacing Criteria (0/90/45): 1.25 / 1.3 / 1.41  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct

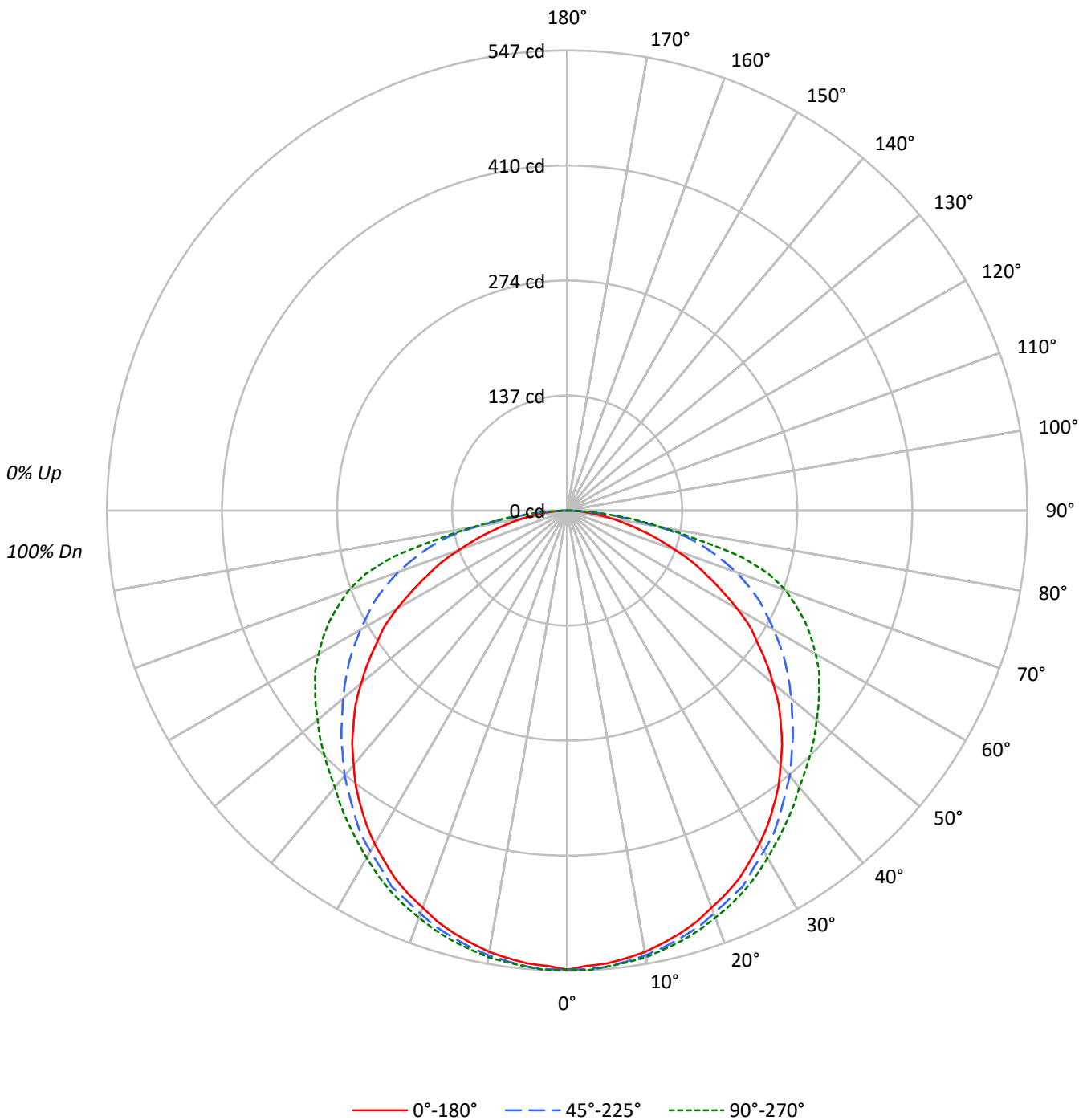
Input Watts (W): 20.925  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P277568

CATALOG NUMBER: 22CZ2-29HE-RDP-UNV-L82765-W2A1-U-3500K

### Luminous Intensity Polar Plot





TEST NUMBER: P277568

CATALOG NUMBER: 22CZ2-29HE-RDP-UNV-L82765-W2A1-U-3500K

**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	100	96	92	96	92	89	92	89	86	88	86	84	82
2	97	88	81	75	95	86	80	74	83	77	72	80	75	71	76	72	69	67
3	88	77	68	61	86	75	67	61	72	65	60	70	64	59	67	62	58	55
4	80	68	59	51	78	66	58	51	64	56	50	61	55	50	59	54	49	47
5	74	60	51	44	72	59	50	44	57	49	43	55	48	43	53	47	42	40
6	68	54	45	38	66	53	44	38	51	43	38	50	43	37	48	42	37	35
7	63	49	40	33	61	48	39	33	47	39	33	45	38	33	44	37	33	31
8	59	45	36	30	57	44	35	30	43	35	29	41	34	29	40	34	29	27
9	55	41	32	27	53	40	32	27	39	32	26	38	31	26	37	31	26	24
10	51	38	30	24	50	37	29	24	36	29	24	35	29	24	34	28	24	22

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	1468	1468	1468
5°	1460	1470	1470
10°	1456	1467	1473
15°	1449	1463	1474
20°	1438	1460	1475
25°	1434	1464	1480
30°	1422	1453	1481
35°	1406	1448	1490
40°	1387	1446	1508
45°	1367	1444	1556
50°	1338	1455	1621
55°	1301	1487	1715
60°	1258	1527	1836
65°	1172	1603	1985
70°	1076	1679	2172
75°	943	1766	2245
80°	812	1683	1762
85°	710	1223	1340



TEST NUMBER: P277568

CATALOG NUMBER: 22CZ2-29HE-RDP-UNV-L82765-W2A1-U-3500K

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	51.6	3.0
10°-20°	148.2	8.5
20°-30°	226.1	13.0
30°-40°	276.1	15.9
40°-50°	295.2	17.0
50°-60°	284.9	16.4
60°-70°	245.3	14.1
70°-80°	165.9	9.6
80°-90°	43.8	2.5
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°	425.9	24.5
0°-40°	702.0	40.4
0°-60°	1282.0	73.8
0°-90°	1737.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1737.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	546	546	546	546	546	
5°	540	542	544	544	544	51
15°	520	521	525	528	529	147
25°	483	486	493	496	498	222
35°	428	432	441	450	454	268
45°	359	366	380	399	409	277
55°	277	286	317	349	366	248
65°	184	202	252	291	312	183
75°	91	120	170	204	216	97
85°	23	32	40	41	43	26
90°	0	0	0	0	0	



TEST NUMBER: P277568

CATALOG NUMBER: 22CZ2-29HE-RDP-UNV-L82765-W2A1-U-3500K

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	545.6	545.6	545.6	545.6	545.6
2.5°	541.8	543.1	545.6	545.6	546.9
5°	540.5	541.8	544.3	544.3	544.3
7.5°	536.7	538.0	540.5	541.8	541.8
10°	532.8	534.1	536.7	538.0	539.2
12.5°	526.5	527.7	531.6	534.1	534.1
15°	520.1	521.3	525.2	527.7	529.0
17.5°	512.4	515.0	518.8	521.3	522.6
20°	502.2	504.7	509.8	513.7	515.0
22.5°	493.2	495.8	500.9	504.7	507.3
25°	483.0	485.6	493.2	495.8	498.3
27.5°	470.2	472.8	479.2	484.3	488.1
30°	457.5	460.0	467.7	474.1	476.6
32.5°	443.4	447.2	456.2	461.3	465.1
35°	428.1	431.9	440.8	449.8	453.6
37.5°	412.7	416.6	425.5	437.0	442.1
40°	394.8	400.0	411.5	426.8	429.3
42.5°	378.2	384.6	394.8	412.7	419.1
45°	359.1	365.5	379.5	398.7	408.9
47.5°	341.2	347.6	362.9	385.9	398.7
50°	319.5	328.4	347.6	374.4	387.2
52.5°	299.0	306.7	332.2	361.6	377.0
55°	277.3	286.2	316.9	348.8	365.5
57.5°	258.1	265.8	300.3	336.1	355.2
60°	233.8	244.1	283.7	322.0	341.2
62.5°	208.3	223.6	267.1	306.7	327.1
65°	184.0	201.9	251.7	291.3	311.8
67.5°	162.3	181.4	232.6	274.7	293.9
70°	136.7	161.0	213.4	254.3	276.0
72.5°	113.7	140.6	191.7	232.6	251.7
75°	90.7	120.1	169.9	204.4	215.9
77.5°	70.3	98.4	145.7	155.9	157.2
80°	52.4	77.9	108.6	109.9	113.7
82.5°	35.8	54.9	70.3	76.7	77.9
85°	23.0	31.9	39.6	40.9	43.4
87.5°	10.2	11.5	14.1	12.8	12.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)