

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: P277403

Luminaire Tested: **22CZ2-29HE-S-UNV-L82765-W2A1-U-5000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P277403
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: 22CZ2-29HE-S-UNV-L82765-W2A1-U-5000K
Description: CRUZE 2.0 2x2 TUNABLE WHITE LED TROFFER
WITH SMOOTH LENS
Light Source: (168) 80 CRI LEDS TUNED TO 5000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2885.0 lumens
Efficiency: N/A
Efficacy: 135.5 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

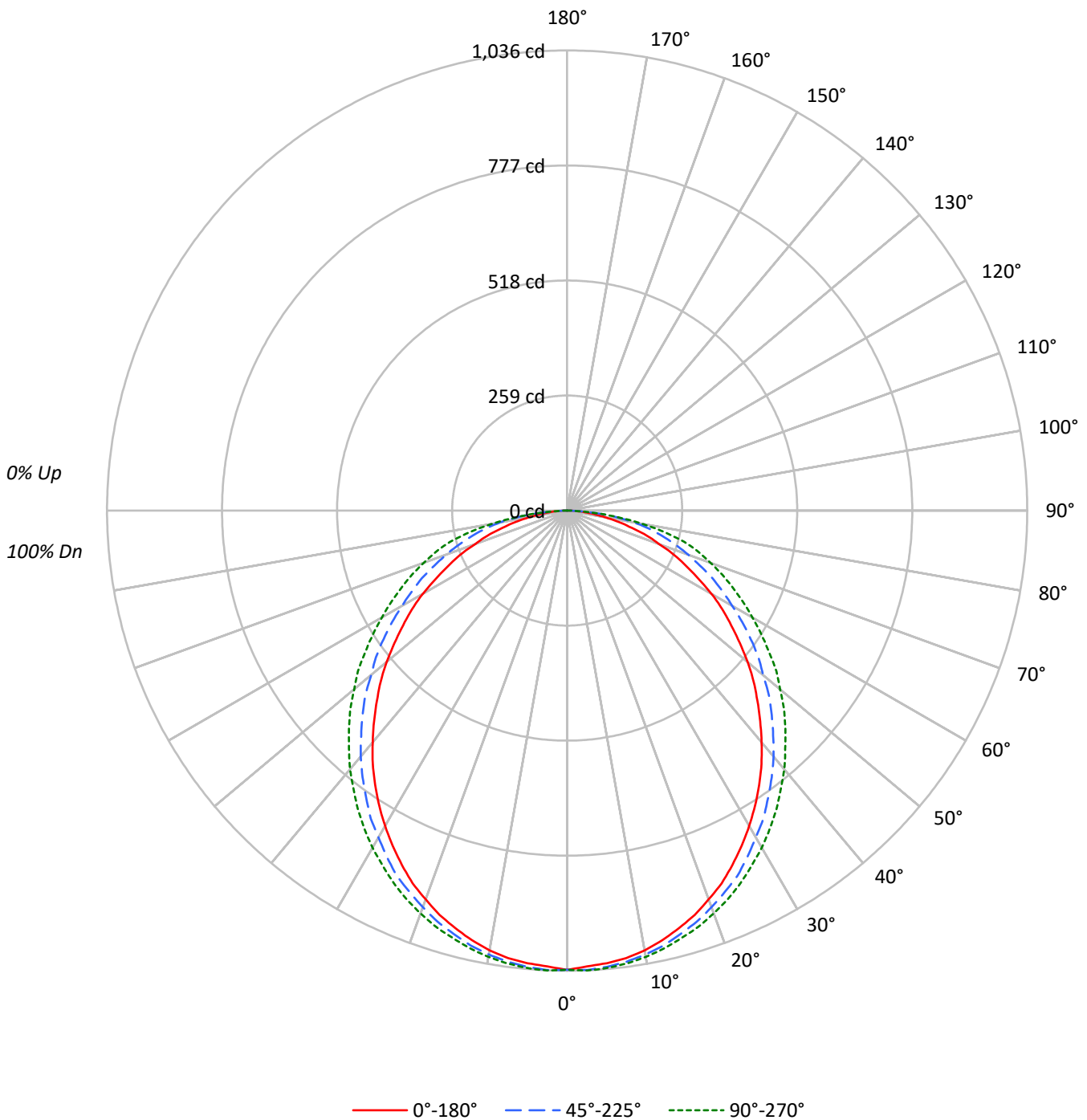
Input Watts (W): 21.297
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P277403

CATALOG NUMBER: 22CZ2-29HE-S-UNV-L82765-W2A1-U-5000K

Luminous Intensity Polar Plot





TEST NUMBER: P277403

CATALOG NUMBER: 22CZ2-29HE-S-UNV-L82765-W2A1-U-5000K

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°	2782	2782	2782
5°	2763	2785	2793
10°	2748	2773	2788
15°	2711	2749	2775
20°	2668	2721	2764
25°	2614	2694	2746
30°	2547	2639	2723
35°	2476	2591	2697
40°	2393	2539	2672
45°	2305	2479	2643
50°	2220	2412	2620
55°	2115	2368	2602
60°	2021	2311	2594
65°	1885	2297	2623
70°	1737	2277	2700
75°	1568	2309	2842
80°	1356	2379	2670
85°	1121	1995	1995



TEST NUMBER: P277403

CATALOG NUMBER: 22CZ2-29HE-S-UNV-L82765-W2A1-U-5000K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	97.8	3.4
10°-20°	278.2	9.6
20°-30°	416.3	14.4
30°-40°	493.0	17.1
40°-50°	502.4	17.4
50°-60°	450.3	15.6
60°-70°	352.5	12.2
70°-80°	227.3	7.9
80°-90°	67.2	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°	792.3	27.5
0°-40°	1285.2	44.5
0°-60°	2238.0	77.6
0°-90°	2885.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2885.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1034	1034	1034	1034	1034	
5°	1023	1026	1031	1032	1034	97
15°	973	979	987	995	996	274
25°	880	888	907	919	925	405
35°	754	763	789	813	821	471
45°	606	619	652	685	695	468
55°	451	466	505	540	555	404
65°	296	314	361	396	412	294
75°	151	174	222	260	273	162
85°	36	50	65	65	65	43
90°	0	0	0	0	0	



TEST NUMBER: P277403

CATALOG NUMBER: 22CZ2-29HE-S-UNV-L82765-W2A1-U-5000K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1033.8	1033.8	1033.8	1033.8	1033.8
2.5°	1027.1	1029.7	1035.1	1036.5	1036.5
5°	1023.0	1025.7	1031.1	1032.4	1033.8
7.5°	1016.3	1017.6	1024.4	1027.1	1028.4
10°	1005.5	1008.2	1014.9	1019.0	1020.3
12.5°	990.7	994.7	1002.8	1008.2	1009.6
15°	973.2	978.6	986.7	994.7	996.1
17.5°	954.4	959.8	970.5	979.9	982.6
20°	931.5	938.2	950.3	961.1	965.1
22.5°	908.6	914.0	928.8	942.3	946.3
25°	880.3	888.4	907.3	919.4	924.8
27.5°	850.7	860.1	879.0	895.1	900.5
30°	819.8	829.2	849.4	869.6	876.3
32.5°	787.5	798.2	822.5	842.6	849.4
35°	753.8	763.2	788.8	813.0	821.1
37.5°	718.8	726.9	756.5	782.1	790.1
40°	681.1	691.9	722.8	752.5	760.5
42.5°	643.4	655.5	686.5	718.8	726.9
45°	605.7	619.2	651.5	685.2	694.6
47.5°	569.4	580.2	616.5	648.8	662.3
50°	530.4	541.1	576.1	612.5	625.9
52.5°	490.0	504.8	542.5	577.5	593.6
55°	450.9	465.7	504.8	539.8	554.6
57.5°	414.6	426.7	467.1	503.4	518.2
60°	375.6	386.3	429.4	468.4	481.9
62.5°	333.8	350.0	394.4	430.7	446.9
65°	296.1	313.6	360.7	395.7	411.9
67.5°	261.1	277.3	323.1	360.7	378.2
70°	220.8	242.3	289.4	327.1	343.2
72.5°	188.5	207.3	255.8	293.4	310.9
75°	150.8	173.6	222.1	259.8	273.3
77.5°	119.8	142.7	188.5	218.1	224.8
80°	87.5	110.4	153.5	168.3	172.3
82.5°	59.2	80.8	110.4	114.4	115.8
85°	36.3	49.8	64.6	64.6	64.6
87.5°	17.5	20.2	22.9	21.5	21.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)