

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: P277459

Luminaire Tested: **22CZ2-29HE-S-UNV-L92765-W2A1-U-5700K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P277459
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-L92765-W2A1-U-5700K
Description: CRUZE 2.0 2x2 TUNABLE WHITE LED TROFFER
WITH SMOOTH LENS
Light Source: (168) 90 CRI LEDS TUNED TO 5700K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2641.0 lumens
Efficiency: N/A
Efficacy: 122.9 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

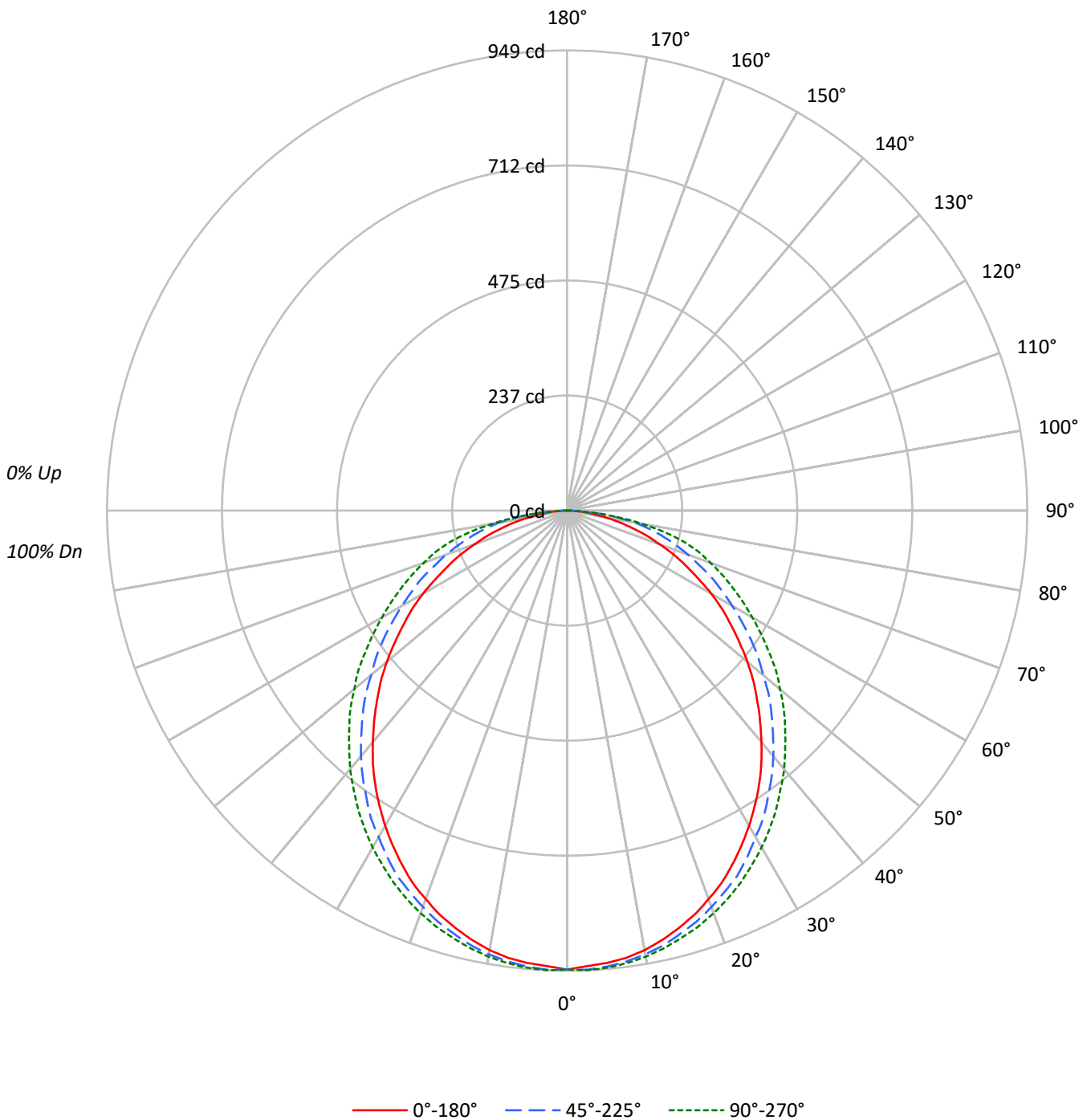
Input Watts (W): 21.483
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2547	2547	2547
5°	2530	2550	2556
10°	2515	2539	2552
15°	2482	2516	2540
20°	2442	2491	2530
25°	2393	2466	2513
30°	2332	2416	2493
35°	2267	2372	2469
40°	2190	2324	2446
45°	2110	2270	2420
50°	2033	2208	2399
55°	1937	2168	2382
60°	1850	2116	2374
65°	1726	2103	2401
70°	1590	2084	2472
75°	1435	2114	2600
80°	1241	2177	2444
85°	1028	1825	1825



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	89.5	3.4
10°-20°	254.7	9.6
20°-30°	381.1	14.4
30°-40°	451.3	17.1
40°-50°	459.9	17.4
50°-60°	412.2	15.6
60°-70°	322.7	12.2
70°-80°	208.1	7.9
80°-90°	61.5	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°	725.3	27.5
0°-40°	1176.5	44.5
0°-60°	2048.7	77.6
0°-90°	2641.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2641.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	946	946	946	946	946	
5°	936	939	944	945	946	89
15°	891	896	903	911	912	251
25°	806	813	830	842	846	371
35°	690	699	722	744	752	431
45°	554	567	596	627	636	428
55°	413	426	462	494	508	370
65°	271	287	330	362	377	269
75°	138	159	203	238	250	148
85°	33	46	59	59	59	39
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	946.4	946.4	946.4	946.4	946.4
2.5°	940.2	942.7	947.6	948.8	948.8
5°	936.5	939.0	943.9	945.1	946.4
7.5°	930.3	931.6	937.7	940.2	941.4
10°	920.5	922.9	929.1	932.8	934.0
12.5°	906.9	910.6	918.0	922.9	924.2
15°	890.9	895.8	903.2	910.6	911.9
17.5°	873.7	878.6	888.4	897.1	899.5
20°	852.7	858.9	870.0	879.8	883.5
22.5°	831.8	836.7	850.2	862.6	866.3
25°	805.9	813.3	830.5	841.6	846.5
27.5°	778.8	787.4	804.6	819.4	824.4
30°	750.4	759.1	777.5	796.0	802.2
32.5°	720.9	730.7	752.9	771.4	777.5
35°	690.0	698.7	722.1	744.3	751.7
37.5°	658.0	665.4	692.5	715.9	723.3
40°	623.5	633.4	661.7	688.8	696.2
42.5°	589.0	600.1	628.4	658.0	665.4
45°	554.5	566.8	596.4	627.2	635.8
47.5°	521.2	531.1	564.4	593.9	606.3
50°	485.5	495.4	527.4	560.7	573.0
52.5°	448.5	462.1	496.6	528.6	543.4
55°	412.8	426.4	462.1	494.1	507.7
57.5°	379.5	390.6	427.6	460.9	474.4
60°	343.8	353.7	393.1	428.8	441.1
62.5°	305.6	320.4	361.0	394.3	409.1
65°	271.1	287.1	330.2	362.3	377.1
67.5°	239.1	253.8	295.7	330.2	346.3
70°	202.1	221.8	264.9	299.4	314.2
72.5°	172.5	189.8	234.1	268.6	284.6
75°	138.0	159.0	203.3	237.8	250.1
77.5°	109.7	130.6	172.5	199.6	205.8
80°	80.1	101.0	140.5	154.0	157.7
82.5°	54.2	73.9	101.0	104.7	106.0
85°	33.3	45.6	59.1	59.1	59.1
87.5°	16.0	18.5	20.9	19.7	19.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)