

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: P277398

Luminaire Tested: **22CZ2-29HE-S-UNV-L82765-W2A1-U-2700K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P277398
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-2700K
Description: CRUZE 2.0 2x2 TUNABLE WHITE LED TROFFER WITH SMOOTH LENS
Light Source: (168) 80 CRI LEDS TUNED TO 2700K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2570.0 lumens
Efficiency: N/A
Efficacy: 123.4 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

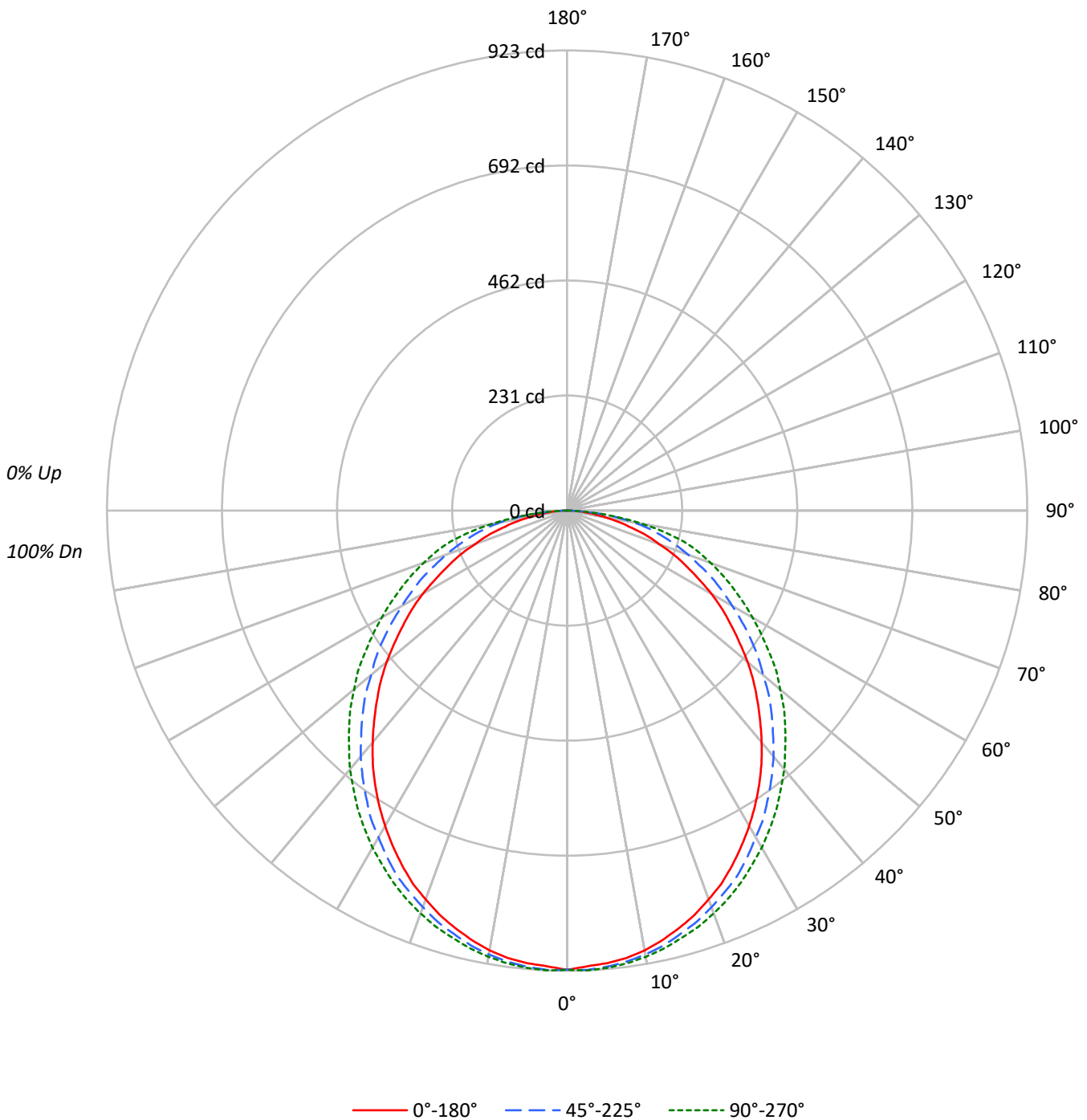
Input Watts (W): 20.832
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2478	2478	2478
5°	2462	2481	2488
10°	2447	2470	2484
15°	2415	2449	2472
20°	2376	2424	2462
25°	2328	2400	2446
30°	2269	2351	2426
35°	2206	2308	2403
40°	2131	2262	2380
45°	2054	2209	2355
50°	1978	2148	2334
55°	1885	2110	2318
60°	1800	2059	2310
65°	1680	2046	2336
70°	1548	2028	2406
75°	1396	2058	2531
80°	1207	2118	2379
85°	1000	1778	1778



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	87.1	3.4
10°-20°	247.8	9.6
20°-30°	370.8	14.4
30°-40°	439.2	17.1
40°-50°	447.6	17.4
50°-60°	401.1	15.6
60°-70°	314.1	12.2
70°-80°	202.5	7.9
80°-90°	59.8	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°	705.8	27.5
0°-40°	1144.9	44.5
0°-60°	1993.6	77.6
0°-90°	2570.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2570.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	921	921	921	921	921	
5°	911	914	918	920	921	87
15°	867	872	879	886	887	244
25°	784	791	808	819	824	361
35°	672	680	703	724	732	420
45°	540	552	580	610	619	417
55°	402	415	450	481	494	360
65°	264	279	321	352	367	262
75°	134	155	198	231	243	144
85°	32	44	58	58	58	38
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	920.9	920.9	920.9	920.9	920.9
2.5°	914.9	917.3	922.1	923.3	923.3
5°	911.3	913.7	918.5	919.7	920.9
7.5°	905.3	906.5	912.5	914.9	916.1
10°	895.7	898.1	904.1	907.7	908.9
12.5°	882.5	886.1	893.3	898.1	899.3
15°	867.0	871.7	878.9	886.1	887.3
17.5°	850.2	855.0	864.6	872.9	875.3
20°	829.8	835.8	846.6	856.2	859.8
22.5°	809.4	814.2	827.4	839.4	843.0
25°	784.2	791.4	808.2	819.0	823.8
27.5°	757.8	766.2	783.0	797.4	802.2
30°	730.3	738.6	756.6	774.6	780.6
32.5°	701.5	711.1	732.7	750.6	756.6
35°	671.5	679.9	702.7	724.3	731.5
37.5°	640.3	647.5	673.9	696.7	703.9
40°	606.7	616.3	643.9	670.3	677.5
42.5°	573.2	584.0	611.5	640.3	647.5
45°	539.6	551.6	580.4	610.3	618.7
47.5°	507.2	516.8	549.2	578.0	590.0
50°	472.4	482.0	513.2	545.6	557.6
52.5°	436.5	449.7	483.2	514.4	528.8
55°	401.7	414.9	449.7	480.8	494.0
57.5°	369.3	380.1	416.1	448.5	461.7
60°	334.5	344.1	382.5	417.3	429.3
62.5°	297.4	311.8	351.3	383.7	398.1
65°	263.8	279.4	321.4	352.5	366.9
67.5°	232.6	247.0	287.8	321.4	336.9
70°	196.7	215.8	257.8	291.4	305.8
72.5°	167.9	184.7	227.8	261.4	277.0
75°	134.3	154.7	197.9	231.4	243.4
77.5°	106.7	127.1	167.9	194.3	200.3
80°	77.9	98.3	136.7	149.9	153.5
82.5°	52.8	71.9	98.3	101.9	103.1
85°	32.4	44.4	57.6	57.6	57.6
87.5°	15.6	18.0	20.4	19.2	19.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)