

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: P277401

Luminaire Tested: **22CZ2-29HE-S-UNV-L82765-W2A1-U-4000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P277401  
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-4000K  
Description: CRUZE 2.0 2x2 TUNABLE WHITE LED TROFFER  
WITH SMOOTH LENS  
Light Source: (168) 80 CRI LEDS TUNED TO 4000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2796.0 lumens  
Efficiency: N/A  
Efficacy: 132.4 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

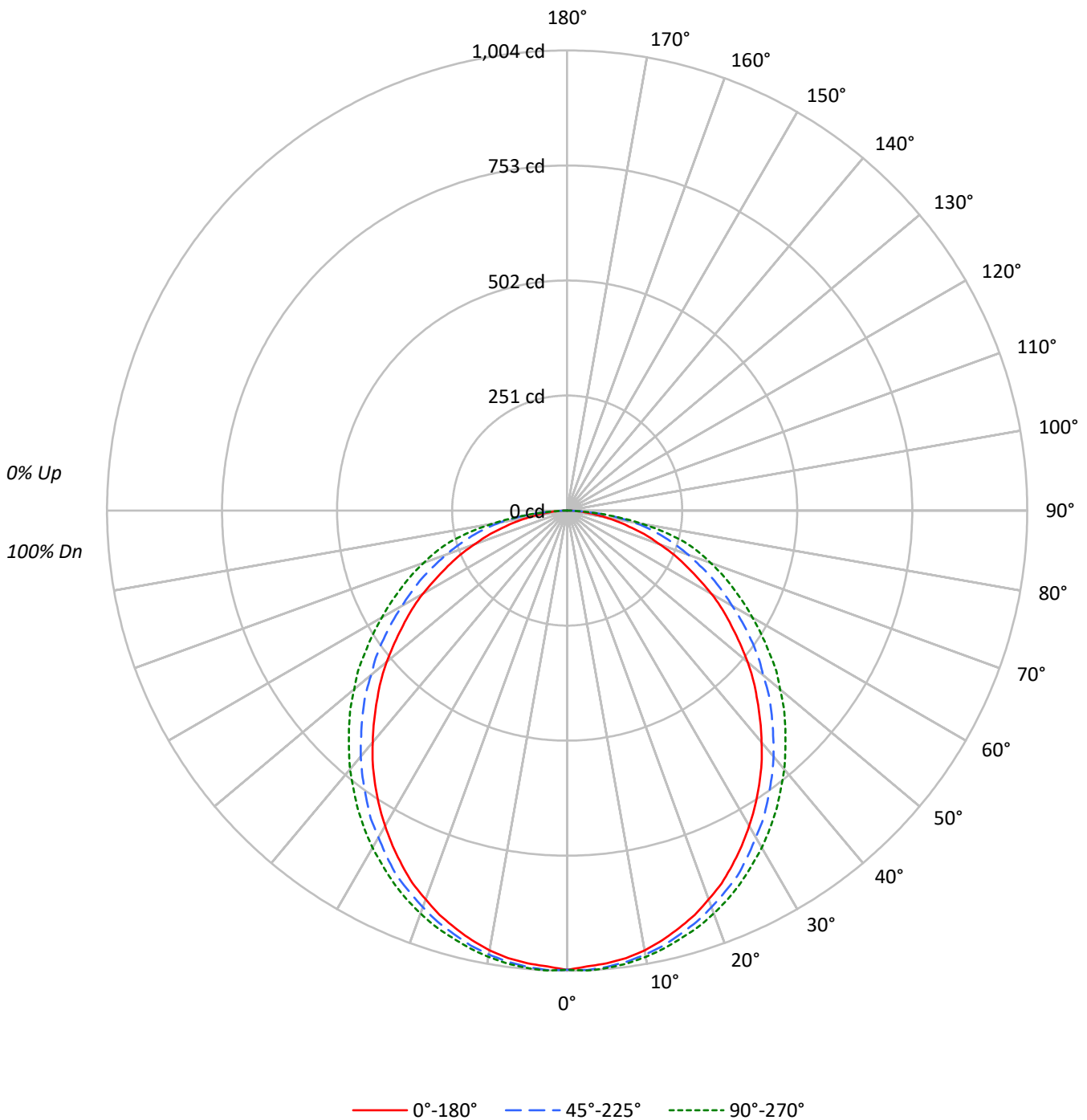
Input Watts (W): 21.111  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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					100			
1	108	103	99	95	106	101	97	94	97	94	91	93	90	88	89	87	85	83					83			
2	98	90	83	77	96	88	82	76	84	79	74	81	77	73	78	74	71	69					69			
3	90	79	71	64	87	77	70	63	74	68	62	72	66	61	69	64	60	58					58			
4	82	70	61	54	80	69	60	54	66	59	53	64	57	52	61	56	52	49					49			
5	75	62	53	47	73	61	53	46	59	52	46	57	51	45	55	50	45	43					43			
6	70	56	47	41	68	55	47	41	53	46	40	52	45	40	50	44	39	37					37			
7	65	51	42	36	63	50	42	36	49	41	36	47	40	35	46	40	35	33					33			
8	60	47	38	32	59	46	38	32	45	37	32	43	37	32	42	36	31	30					30			
9	56	43	35	29	55	42	34	29	41	34	29	40	33	29	39	33	28	27					27			
10	53	40	32	26	51	39	31	26	38	31	26	37	31	26	36	30	26	24					24			

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

	0°	45°	90°
0°	2696	2696	2696
5°	2678	2699	2706
10°	2663	2688	2702
15°	2628	2664	2690
20°	2585	2637	2679
25°	2533	2611	2661
30°	2469	2558	2639
35°	2400	2511	2614
40°	2319	2461	2589
45°	2234	2403	2562
50°	2152	2337	2539
55°	2050	2295	2522
60°	1959	2240	2513
65°	1827	2226	2542
70°	1683	2207	2618
75°	1519	2239	2753
80°	1314	2304	2588
85°	1087	1933	1933



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	94.7	3.4
10°-20°	269.6	9.6
20°-30°	403.4	14.4
30°-40°	477.8	17.1
40°-50°	486.9	17.4
50°-60°	436.4	15.6
60°-70°	341.7	12.2
70°-80°	220.3	7.9
80°-90°	65.1	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°	767.8	27.5
0°-40°	1245.6	44.5
0°-60°	2168.9	77.6
0°-90°	2796.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2796.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1002	1002	1002	1002	1002	
5°	992	994	999	1001	1002	94
15°	943	948	956	964	965	266
25°	853	861	879	891	896	393
35°	730	740	764	788	796	457
45°	587	600	631	664	673	453
55°	437	451	489	523	538	392
65°	287	304	350	384	399	285
75°	146	168	215	252	265	157
85°	35	48	63	63	63	41
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1001.9	1001.9	1001.9	1001.9	1001.9
2.5°	995.4	998.0	1003.2	1004.5	1004.5
5°	991.5	994.1	999.3	1000.6	1001.9
7.5°	984.9	986.2	992.8	995.4	996.7
10°	974.5	977.1	983.6	987.5	988.8
12.5°	960.1	964.1	971.9	977.1	978.4
15°	943.2	948.4	956.2	964.1	965.4
17.5°	924.9	930.1	940.6	949.7	952.3
20°	902.7	909.3	921.0	931.4	935.4
22.5°	880.6	885.8	900.1	913.2	917.1
25°	853.2	861.0	879.3	891.0	896.2
27.5°	824.5	833.6	851.9	867.5	872.7
30°	794.5	803.6	823.2	842.7	849.3
32.5°	763.2	773.6	797.1	816.6	823.2
35°	730.5	739.7	764.5	787.9	795.8
37.5°	696.6	704.5	733.2	757.9	765.8
40°	660.1	670.5	700.5	729.2	737.1
42.5°	623.6	635.3	665.3	696.6	704.5
45°	587.0	600.1	631.4	664.0	673.1
47.5°	551.8	562.3	597.5	628.8	641.8
50°	514.0	524.4	558.3	593.6	606.6
52.5°	474.9	489.2	525.7	559.7	575.3
55°	437.0	451.4	489.2	523.1	537.5
57.5°	401.8	413.5	452.7	487.9	502.3
60°	364.0	374.4	416.2	454.0	467.0
62.5°	323.5	339.2	382.2	417.5	433.1
65°	287.0	304.0	349.6	383.5	399.2
67.5°	253.1	268.7	313.1	349.6	366.6
70°	213.9	234.8	280.5	317.0	332.7
72.5°	182.6	200.9	247.9	284.4	301.4
75°	146.1	168.3	215.3	251.8	264.8
77.5°	116.1	138.3	182.6	211.3	217.9
80°	84.8	107.0	148.7	163.1	167.0
82.5°	57.4	78.3	107.0	110.9	112.2
85°	35.2	48.3	62.6	62.6	62.6
87.5°	17.0	19.6	22.2	20.9	20.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)