

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: P277235

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

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P277235  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-27)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 22CZ2-29HE-UNV-L82765-W2A1-U-5000K  
Description: CRUZE 2.0 2x2 TUNABLE WHITE LED TROFFER WITH RIBBED LENS  
Light Source: (168) 80 CRI LEDS TUNED TO 5000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2735.0 lumens  
Efficiency: N/A  
Efficacy: 128.4 lumens/watt  
Spacing Criteria (0/90/45): 1.19 / 1.27 / 1.36  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct

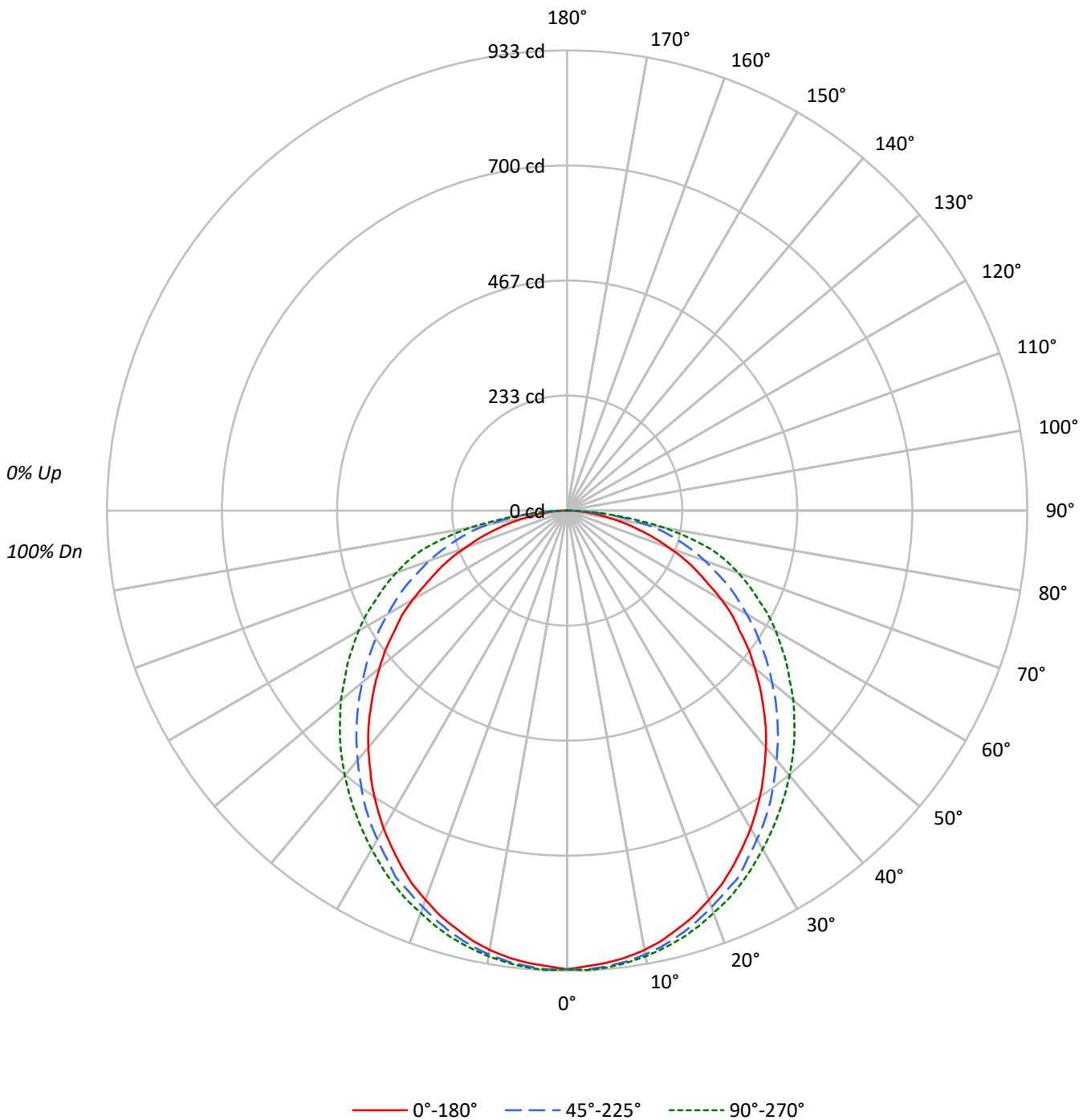
Input Watts (W): 21.297  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	98	94	105	101	96	93	96	93	90	92	90	87	89	86	84	82
2	98	89	82	76	95	87	81	75	84	78	73	80	76	71	77	73	70	68
3	89	78	69	63	86	76	68	62	73	66	61	70	65	60	68	63	59	56
4	81	69	60	53	79	67	59	52	65	57	52	63	56	51	60	55	50	48
5	75	61	52	45	72	60	52	45	58	50	44	56	49	44	54	48	44	41
6	69	55	46	39	67	54	46	39	52	45	39	51	44	39	49	43	38	36
7	64	50	41	35	62	49	41	35	48	40	34	46	39	34	45	39	34	32
8	59	46	37	31	58	45	37	31	44	36	31	42	35	30	41	35	30	28
9	56	42	34	28	54	41	33	28	40	33	28	39	32	27	38	32	27	25
10	52	39	31	25	51	38	30	25	37	30	25	36	30	25	35	29	25	23

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

	0°	45°	90°
0°	2503	2503	2503
5°	2487	2505	2512
10°	2471	2497	2508
15°	2441	2478	2501
20°	2405	2451	2486
25°	2362	2437	2477
30°	2312	2392	2463
35°	2259	2361	2458
40°	2203	2321	2463
45°	2141	2294	2479
50°	2079	2271	2507
55°	2008	2260	2551
60°	1948	2260	2629
65°	1851	2297	2725
70°	1726	2340	2902
75°	1581	2420	3135
80°	1376	2523	3087
85°	1204	2245	2452



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	87.9	3.2
10°-20°	250.5	9.2
20°-30°	376.1	13.7
30°-40°	449.4	16.4
40°-50°	467.3	17.1
50°-60°	433.1	15.8
60°-70°	355.2	13.0
70°-80°	240.1	8.8
80°-90°	75.4	2.8
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°	714.5	26.1
0°-40°	1163.9	42.6
0°-60°	2064.2	75.5
0°-90°	2735.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2735.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	930	930	930	930	930	
5°	920	922	927	929	930	87
15°	876	880	890	895	898	247
25°	795	802	821	830	834	366
35°	688	697	719	740	748	430
45°	562	573	603	638	651	434
55°	428	441	482	525	544	385
65°	291	307	361	408	428	287
75°	152	178	233	280	302	161
85°	39	54	73	81	79	44
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	930.0	930.0	930.0	930.0	930.0
2.5°	924.6	927.3	931.3	932.6	932.6
5°	920.5	921.9	927.3	928.6	930.0
7.5°	913.8	916.5	921.9	923.2	924.6
10°	904.4	907.1	913.8	916.5	917.8
12.5°	892.3	895.0	903.0	907.1	908.4
15°	876.1	880.2	889.6	895.0	897.7
17.5°	860.0	864.0	873.4	881.5	884.2
20°	839.8	849.2	855.9	866.7	868.0
22.5°	819.6	825.0	837.1	847.9	853.2
25°	795.4	802.1	820.9	830.4	834.4
27.5°	769.8	779.2	794.0	808.8	814.2
30°	744.2	751.0	769.8	787.3	792.7
32.5°	716.0	725.4	745.6	763.1	771.1
35°	687.7	697.1	718.7	740.2	748.3
37.5°	656.8	667.5	689.1	714.6	725.4
40°	627.1	635.2	660.8	691.7	701.2
42.5°	596.2	605.6	632.5	666.2	676.9
45°	562.5	573.3	602.9	637.9	651.4
47.5°	530.2	541.0	573.3	608.3	624.5
50°	496.6	510.1	542.4	582.7	598.9
52.5°	464.3	476.4	512.8	554.5	569.3
55°	428.0	441.4	481.8	524.9	543.7
57.5°	398.4	407.8	452.2	496.6	515.4
60°	362.0	374.1	419.9	467.0	488.5
62.5°	323.0	343.2	390.3	438.7	460.3
65°	290.7	306.8	360.7	407.8	428.0
67.5°	257.0	274.5	327.0	376.8	399.7
70°	219.4	242.2	297.4	347.2	368.8
72.5°	185.7	209.9	266.5	314.9	337.8
75°	152.1	177.6	232.8	279.9	301.5
77.5°	119.8	148.0	201.9	238.2	251.7
80°	88.8	115.7	162.8	188.4	199.2
82.5°	61.9	84.8	119.8	133.2	135.9
85°	39.0	53.8	72.7	80.7	79.4
87.5°	17.5	21.5	26.9	29.6	28.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)