

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: P277230

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

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P277230  
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-2700K  
Description: CRUZE 2.0 2x2 TUNABLE WHITE LED TROFFER WITH RIBBED LENS  
Light Source: (168) 80 CRI LEDS TUNED TO 2700K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2437.0 lumens  
Efficiency: N/A  
Efficacy: 117.0 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

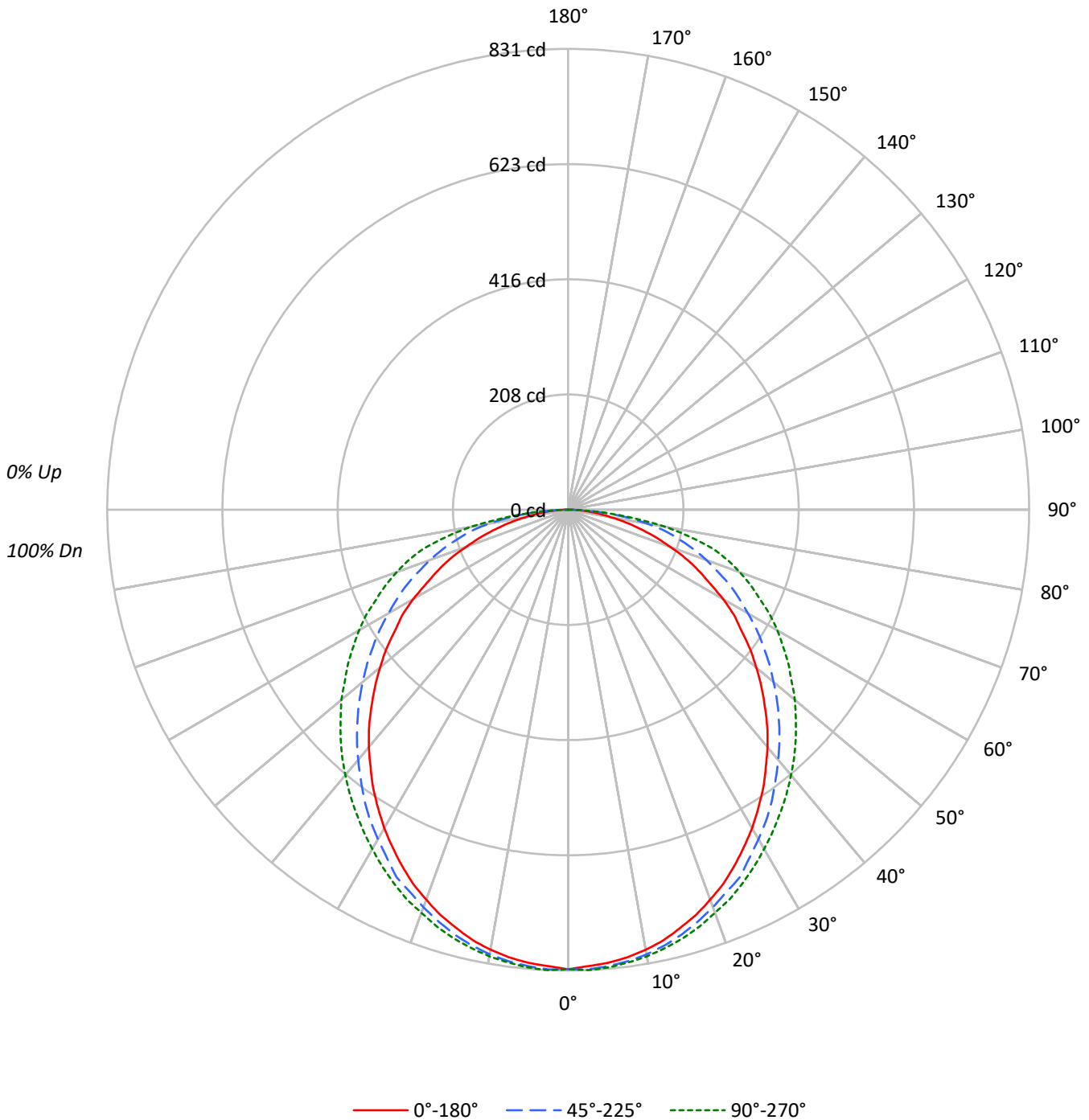
Input Watts (W): 20.832  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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°	2230	2230	2230
5°	2216	2232	2238
10°	2202	2225	2235
15°	2175	2208	2228
20°	2143	2184	2215
25°	2104	2172	2208
30°	2060	2131	2195
35°	2013	2104	2190
40°	1963	2068	2195
45°	1908	2044	2209
50°	1852	2023	2234
55°	1789	2014	2273
60°	1736	2013	2343
65°	1649	2046	2428
70°	1538	2085	2585
75°	1409	2157	2793
80°	1226	2249	2751
85°	1074	2001	2186



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	78.4	3.2
10°-20°	223.2	9.2
20°-30°	335.1	13.7
30°-40°	400.4	16.4
40°-50°	416.3	17.1
50°-60°	385.9	15.8
60°-70°	316.5	13.0
70°-80°	214.0	8.8
80°-90°	67.2	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°	636.7	26.1
0°-40°	1037.0	42.6
0°-60°	1839.3	75.5
0°-90°	2437.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2437.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	829	829	829	829	829	
5°	820	821	826	827	829	78
15°	781	784	793	797	800	220
25°	709	715	732	740	744	326
35°	613	621	640	660	667	383
45°	501	511	537	568	580	387
55°	381	393	429	468	484	343
65°	259	273	321	363	381	256
75°	136	158	208	249	269	144
85°	35	48	65	72	71	39
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	828.6	828.6	828.6	828.6	828.6
2.5°	823.8	826.2	829.8	831.0	831.0
5°	820.2	821.4	826.2	827.4	828.6
7.5°	814.2	816.6	821.4	822.6	823.8
10°	805.8	808.2	814.2	816.6	817.8
12.5°	795.0	797.4	804.6	808.2	809.4
15°	780.7	784.3	792.6	797.4	799.8
17.5°	766.3	769.9	778.3	785.5	787.9
20°	748.3	756.7	762.7	772.3	773.5
22.5°	730.3	735.1	745.9	755.5	760.3
25°	708.7	714.7	731.5	739.9	743.5
27.5°	685.9	694.3	707.5	720.7	725.5
30°	663.1	669.1	685.9	701.5	706.3
32.5°	638.0	646.4	664.3	679.9	687.1
35°	612.8	621.2	640.4	659.5	666.7
37.5°	585.2	594.8	614.0	636.8	646.4
40°	558.8	566.0	588.8	616.4	624.8
42.5°	531.2	539.6	563.6	593.6	603.2
45°	501.3	510.8	537.2	568.4	580.4
47.5°	472.5	482.1	510.8	542.0	556.4
50°	442.5	454.5	483.3	519.2	533.6
52.5°	413.7	424.5	456.9	494.1	507.2
55°	381.3	393.3	429.3	467.7	484.5
57.5°	355.0	363.3	402.9	442.5	459.3
60°	322.6	333.4	374.1	416.1	435.3
62.5°	287.8	305.8	347.8	390.9	410.1
65°	259.0	273.4	321.4	363.3	381.3
67.5°	229.0	244.6	291.4	335.8	356.2
70°	195.5	215.9	265.0	309.4	328.6
72.5°	165.5	187.1	237.4	280.6	301.0
75°	135.5	158.3	207.5	249.4	268.6
77.5°	106.7	131.9	179.9	212.3	224.2
80°	79.1	103.1	145.1	167.9	177.5
82.5°	55.2	75.5	106.7	118.7	121.1
85°	34.8	48.0	64.8	72.0	70.8
87.5°	15.6	19.2	24.0	26.4	25.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)