

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: P277571

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

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P277571  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-24)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 22CZ2-29HE-RDP-UNV-L82765-W2A1-U-5000K  
Description: CRUZE 2.0 2x2 TUNABLE WHITE LED TROFFER WITH RDP LENS  
Light Source: (168) 80 CRI LEDS TUNED TO 5000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1831.0 lumens  
Efficiency: N/A  
Efficacy: 86.0 lumens/watt  
Spacing Criteria (0/90/45): 1.25 / 1.3 / 1.41  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct

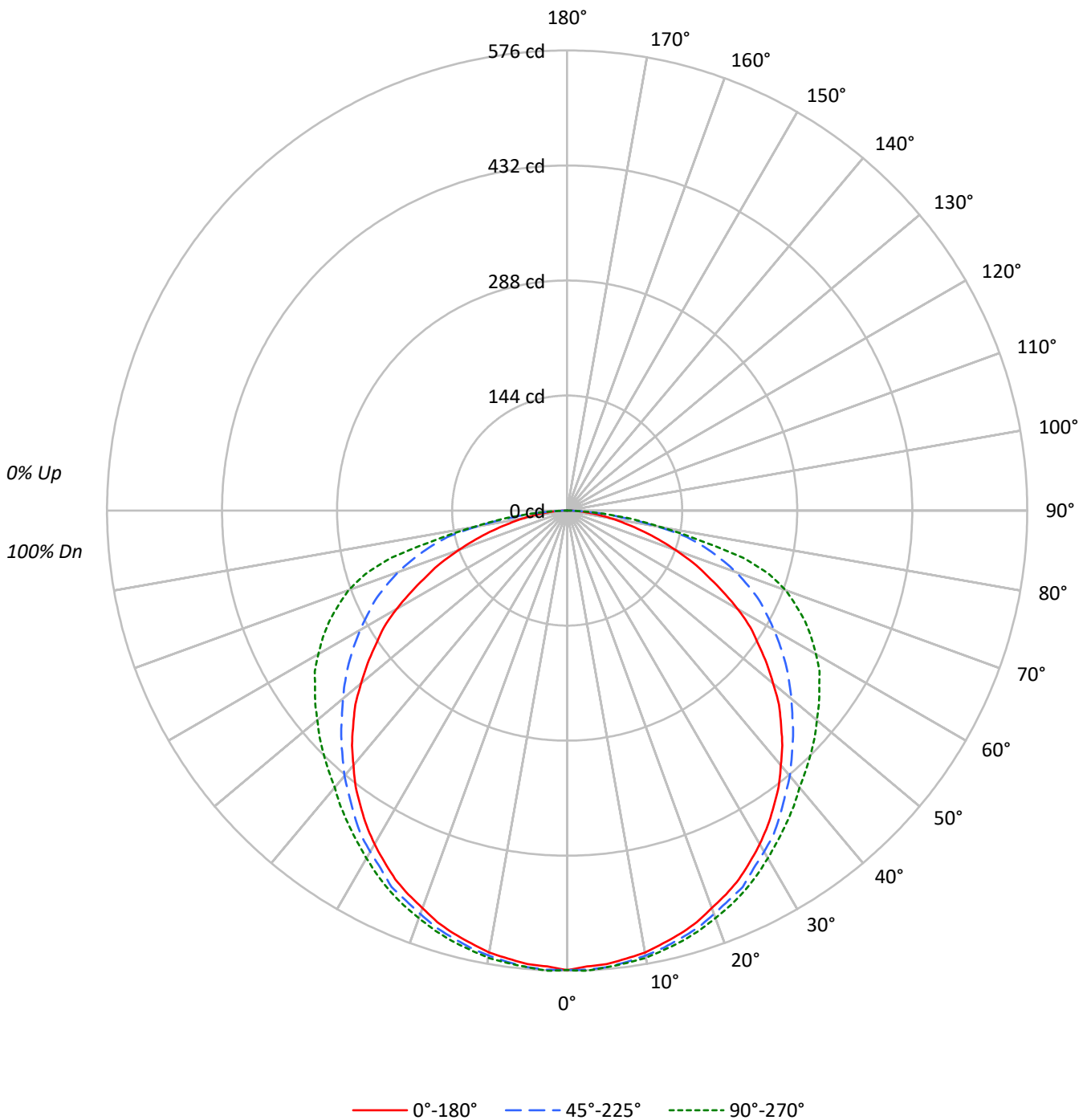
Input Watts (W): 21.297  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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	98	94	105	100	96	92	96	92	89	92	89	86	88	86	84	82					82			
2	97	88	81	75	95	86	80	74	83	77	72	80	75	71	76	72	69	67					67			
3	88	77	68	61	86	75	67	61	72	65	60	70	64	59	67	62	58	55					55			
4	80	68	59	51	78	66	58	51	64	56	50	61	55	50	59	54	49	47					47			
5	74	60	51	44	72	59	50	44	57	49	43	55	48	43	53	47	42	40					40			
6	68	54	45	38	66	53	44	38	51	43	38	50	43	37	48	42	37	35					35			
7	63	49	40	33	61	48	39	33	47	39	33	45	38	33	44	37	33	31					31			
8	59	45	36	30	57	44	35	30	43	35	29	41	34	29	40	34	29	27					27			
9	55	41	32	27	53	40	32	27	39	32	26	38	31	26	37	31	26	24					24			
10	51	38	30	24	50	37	29	24	36	29	24	35	29	24	34	28	24	22					22			

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

	0°	45°	90°
0°	1548	1548	1548
5°	1539	1550	1550
10°	1535	1546	1553
15°	1527	1542	1553
20°	1516	1539	1554
25°	1512	1544	1560
30°	1498	1532	1561
35°	1482	1527	1571
40°	1462	1524	1590
45°	1440	1522	1640
50°	1410	1534	1708
55°	1371	1567	1807
60°	1327	1609	1935
65°	1235	1689	2093
70°	1134	1769	2289
75°	994	1862	2366
80°	855	1774	1858
85°	747	1291	1414



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	54.4	3.0
10°-20°	156.2	8.5
20°-30°	238.3	13.0
30°-40°	291.0	15.9
40°-50°	311.1	17.0
50°-60°	300.3	16.4
60°-70°	258.5	14.1
70°-80°	174.9	9.6
80°-90°	46.2	2.5
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°	448.9	24.5
0°-40°	739.9	40.4
0°-60°	1351.4	73.8
0°-90°	1831.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1831.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	575	575	575	575	575	
5°	570	571	574	574	574	54
15°	548	550	554	556	558	155
25°	509	512	520	523	525	234
35°	451	455	465	474	478	282
45°	378	385	400	420	431	292
55°	292	302	334	368	385	262
65°	194	213	265	307	329	193
75°	96	127	179	216	228	103
85°	24	34	42	43	46	27
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	575.1	575.1	575.1	575.1	575.1
2.5°	571.1	572.5	575.1	575.1	576.5
5°	569.8	571.1	573.8	573.8	573.8
7.5°	565.7	567.1	569.8	571.1	571.1
10°	561.7	563.0	565.7	567.1	568.4
12.5°	554.9	556.3	560.3	563.0	563.0
15°	548.2	549.6	553.6	556.3	557.6
17.5°	540.1	542.8	546.9	549.6	550.9
20°	529.4	532.0	537.4	541.5	542.8
22.5°	519.9	522.6	528.0	532.0	534.7
25°	509.1	511.8	519.9	522.6	525.3
27.5°	495.7	498.4	505.1	510.5	514.5
30°	482.2	484.9	493.0	499.7	502.4
32.5°	467.4	471.4	480.9	486.3	490.3
35°	451.2	455.3	464.7	474.1	478.2
37.5°	435.1	439.1	448.5	460.7	466.0
40°	416.2	421.6	433.7	449.9	452.6
42.5°	398.7	405.4	416.2	435.1	441.8
45°	378.5	385.2	400.0	420.2	431.0
47.5°	359.6	366.4	382.5	406.8	420.2
50°	336.7	346.2	366.4	394.7	408.1
52.5°	315.2	323.3	350.2	381.2	397.4
55°	292.3	301.7	334.0	367.7	385.2
57.5°	272.1	280.2	316.5	354.2	374.5
60°	246.5	257.3	299.0	339.4	359.6
62.5°	219.6	235.7	281.5	323.3	344.8
65°	194.0	212.8	265.3	307.1	328.7
67.5°	171.1	191.3	245.1	289.6	309.8
70°	144.1	169.7	224.9	268.0	290.9
72.5°	119.9	148.2	202.0	245.1	265.3
75°	95.6	126.6	179.1	215.5	227.6
77.5°	74.1	103.7	153.6	164.3	165.7
80°	55.2	82.2	114.5	115.8	119.9
82.5°	37.7	57.9	74.1	80.8	82.2
85°	24.2	33.7	41.8	43.1	45.8
87.5°	10.8	12.1	14.8	13.5	13.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)