

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: P277592

Luminaire Tested: **22CZ2-39HE-RDP-UNV-L82765-W2A1-U-6500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P277592  
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: 22CZ2-39HE-RDP-UNV-L82765-W2A1-U-6500K  
Description: CRUZE 2.0 2x2 TUNABLE WHITE LED TROFFER WITH RDP LENS  
Light Source: (168) 80 CRI LEDS TUNED TO 6500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2567.0 lumens  
Efficiency: N/A  
Efficacy: 81.7 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

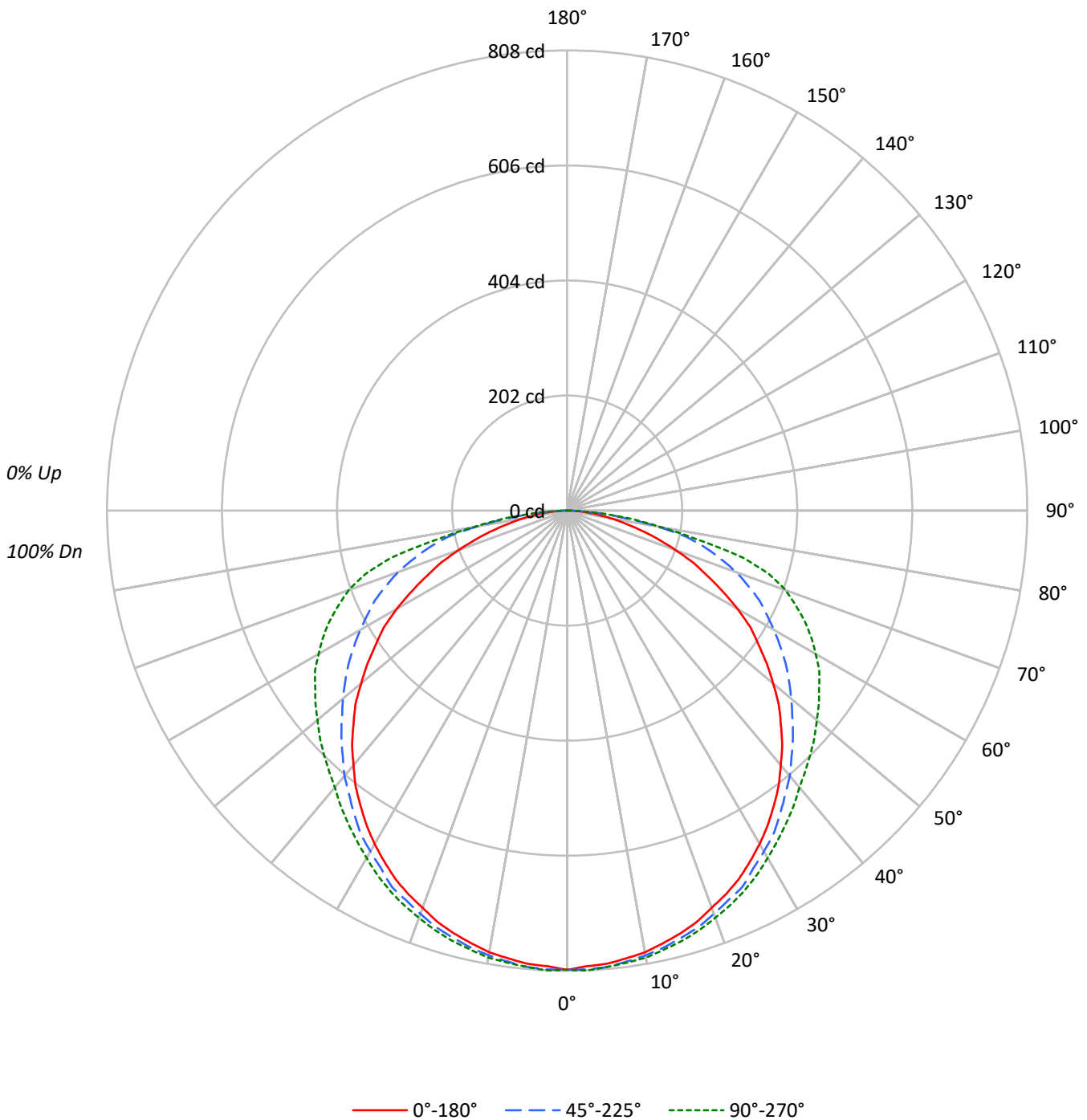
Input Watts (W): 31.434  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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

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

	0°	45°	90°
0°	2170	2170	2170
5°	2158	2173	2173
10°	2152	2167	2178
15°	2141	2162	2178
20°	2125	2158	2179
25°	2119	2164	2187
30°	2101	2147	2189
35°	2078	2140	2202
40°	2050	2136	2229
45°	2019	2134	2300
50°	1976	2150	2395
55°	1923	2197	2534
60°	1860	2256	2714
65°	1731	2369	2934
70°	1590	2482	3209
75°	1394	2612	3318
80°	1199	2487	2605
85°	1050	1806	1982



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	76.3	3.0
10°-20°	219.0	8.5
20°-30°	334.1	13.0
30°-40°	408.0	15.9
40°-50°	436.2	17.0
50°-60°	421.0	16.4
60°-70°	362.5	14.1
70°-80°	245.2	9.6
80°-90°	64.7	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°	629.4	24.5
0°-40°	1037.4	40.4
0°-60°	1894.6	73.8
0°-90°	2567.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2567.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	806	806	806	806	806	
5°	799	801	804	804	804	76
15°	769	770	776	780	782	217
25°	714	718	729	733	736	328
35°	633	638	652	665	670	396
45°	531	540	561	589	604	410
55°	410	423	468	516	540	367
65°	272	298	372	431	461	270
75°	134	178	251	302	319	144
85°	34	47	58	60	64	38
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	806.3	806.3	806.3	806.3	806.3
2.5°	800.7	802.6	806.3	806.3	808.2
5°	798.8	800.7	804.5	804.5	804.5
7.5°	793.1	795.0	798.8	800.7	800.7
10°	787.5	789.3	793.1	795.0	796.9
12.5°	778.0	779.9	785.6	789.3	789.3
15°	768.6	770.5	776.1	779.9	781.8
17.5°	757.2	761.0	766.7	770.5	772.3
20°	742.1	745.9	753.5	759.1	761.0
22.5°	728.9	732.7	740.2	745.9	749.7
25°	713.8	717.6	728.9	732.7	736.5
27.5°	694.9	698.7	708.1	715.7	721.4
30°	676.0	679.8	691.1	700.6	704.4
32.5°	655.3	660.9	674.2	681.7	687.4
35°	632.6	638.3	651.5	664.7	670.4
37.5°	609.9	615.6	628.8	645.8	653.4
40°	583.5	591.1	608.1	630.7	634.5
42.5°	559.0	568.4	583.5	609.9	619.4
45°	530.6	540.1	560.8	589.2	604.3
47.5°	504.2	513.6	536.3	570.3	589.2
50°	472.1	485.3	513.6	553.3	572.2
52.5°	441.9	453.2	491.0	534.4	557.1
55°	409.8	423.0	468.3	515.5	540.1
57.5°	381.5	392.8	443.8	496.6	525.0
60°	345.6	360.7	419.2	475.9	504.2
62.5°	307.8	330.5	394.7	453.2	483.4
65°	271.9	298.4	372.0	430.6	460.8
67.5°	239.8	268.2	343.7	406.0	434.3
70°	202.1	237.9	315.4	375.8	407.9
72.5°	168.1	207.7	283.3	343.7	372.0
75°	134.1	177.5	251.2	302.1	319.1
77.5°	103.9	145.4	215.3	230.4	232.3
80°	77.4	115.2	160.5	162.4	168.1
82.5°	52.9	81.2	103.9	113.3	115.2
85°	34.0	47.2	58.5	60.4	64.2
87.5°	15.1	17.0	20.8	18.9	18.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)