

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: P277643

Luminaire Tested: **22CZ2-39HE-RDP-UNV-L92765-W2A1-U-5000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P277643  
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-L92765-W2A1-U-5000K  
Description: CRUZE 2.0 2x2 TUNABLE WHITE LED TROFFER WITH RDP LENS  
Light Source: (168) 90 CRI LEDS TUNED TO 5000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2271.0 lumens  
Efficiency: N/A  
Efficacy: 73.6 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

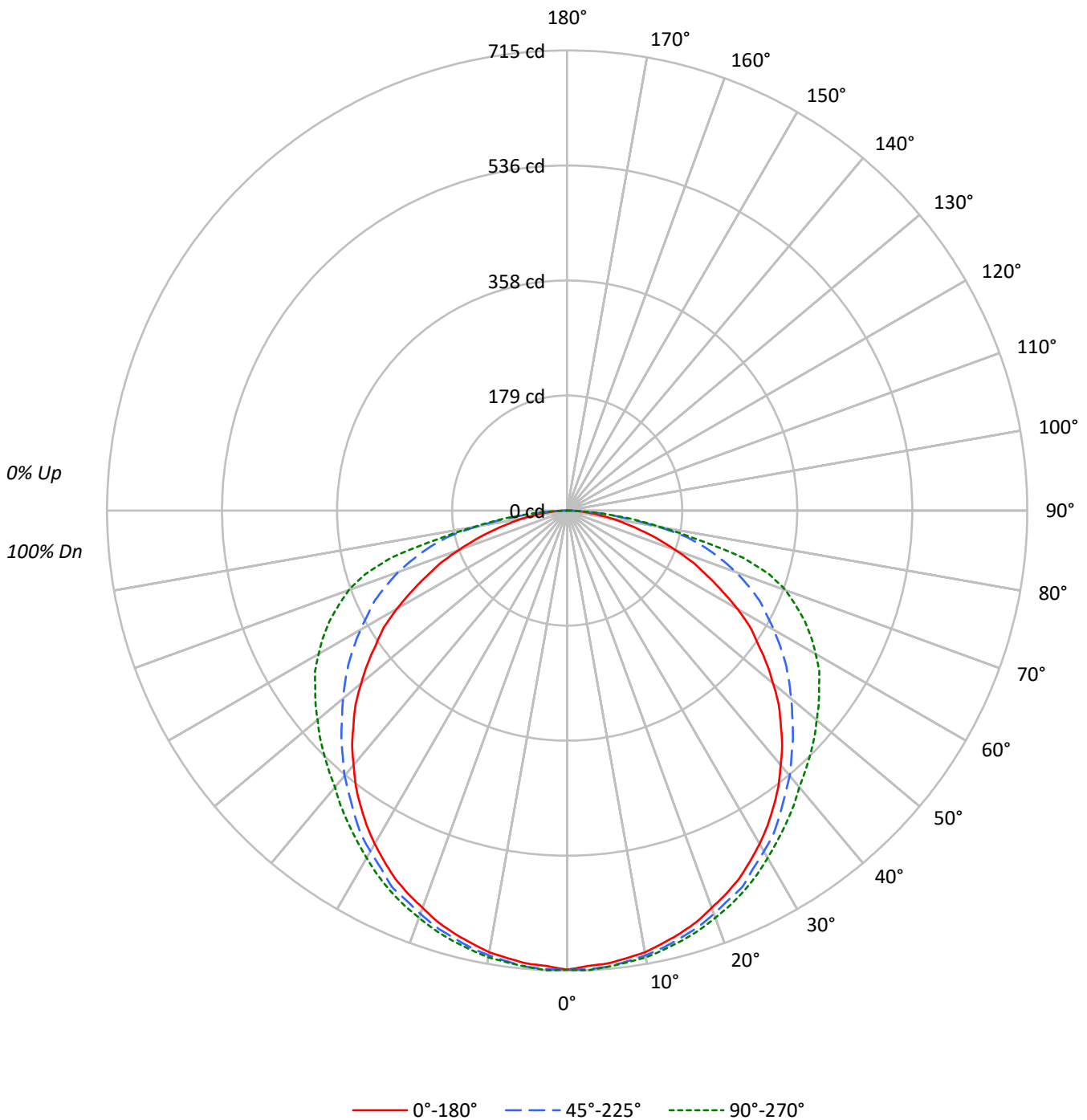
Input Watts (W): 30.876  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	1920	1920	1920
5°	1909	1922	1922
10°	1904	1917	1926
15°	1894	1913	1927
20°	1880	1909	1928
25°	1875	1915	1934
30°	1858	1900	1936
35°	1839	1894	1948
40°	1813	1890	1972
45°	1786	1888	2034
50°	1749	1902	2119
55°	1701	1944	2242
60°	1645	1996	2401
65°	1532	2096	2595
70°	1407	2195	2840
75°	1233	2310	2935
80°	1062	2201	2304
85°	929	1599	1754



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	67.5	3.0
10°-20°	193.7	8.5
20°-30°	295.6	13.0
30°-40°	360.9	15.9
40°-50°	385.9	17.0
50°-60°	372.5	16.4
60°-70°	320.7	14.1
70°-80°	217.0	9.6
80°-90°	57.2	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°	556.8	24.5
0°-40°	917.7	40.4
0°-60°	1676.2	73.8
0°-90°	2271.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2271.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	713	713	713	713	713	
5°	707	708	712	712	712	67
15°	680	682	687	690	692	192
25°	632	635	645	648	652	291
35°	560	565	576	588	593	350
45°	469	478	496	521	535	362
55°	362	374	414	456	478	325
65°	241	264	329	381	408	239
75°	119	157	222	267	282	127
85°	30	42	52	54	57	34
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	713.4	713.4	713.4	713.4	713.4
2.5°	708.3	710.0	713.4	713.4	715.0
5°	706.7	708.3	711.7	711.7	711.7
7.5°	701.7	703.3	706.7	708.3	708.3
10°	696.7	698.3	701.7	703.3	705.0
12.5°	688.3	690.0	695.0	698.3	698.3
15°	679.9	681.6	686.6	690.0	691.6
17.5°	669.9	673.3	678.3	681.6	683.3
20°	656.6	659.9	666.6	671.6	673.3
22.5°	644.9	648.2	654.9	659.9	663.2
25°	631.5	634.8	644.9	648.2	651.5
27.5°	614.8	618.1	626.5	633.2	638.2
30°	598.1	601.4	611.5	619.8	623.1
32.5°	579.7	584.7	596.4	603.1	608.1
35°	559.7	564.7	576.4	588.1	593.1
37.5°	539.6	544.6	556.3	571.4	578.0
40°	516.2	522.9	537.9	558.0	561.3
42.5°	494.5	502.9	516.2	539.6	548.0
45°	469.4	477.8	496.2	521.2	534.6
47.5°	446.1	454.4	474.5	504.5	521.2
50°	417.7	429.4	454.4	489.5	506.2
52.5°	390.9	401.0	434.4	472.8	492.8
55°	362.5	374.2	414.3	456.1	477.8
57.5°	337.5	347.5	392.6	439.4	464.4
60°	305.7	319.1	370.9	421.0	446.1
62.5°	272.3	292.4	349.2	401.0	427.7
65°	240.6	264.0	329.1	380.9	407.6
67.5°	212.2	237.2	304.1	359.2	384.2
70°	178.8	210.5	279.0	332.5	360.9
72.5°	148.7	183.8	250.6	304.1	329.1
75°	118.6	157.0	222.2	267.3	282.3
77.5°	91.9	128.6	190.5	203.8	205.5
80°	68.5	101.9	142.0	143.7	148.7
82.5°	46.8	71.8	91.9	100.2	101.9
85°	30.1	41.8	51.8	53.5	56.8
87.5°	13.4	15.0	18.4	16.7	16.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)