

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: P277644

Luminaire Tested: **22CZ2-39HE-RDP-UNV-L92765-W2A1-U-5500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P277644  
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-5500K  
Description: CRUZE 2.0 2x2 TUNABLE WHITE LED TROFFER WITH RDP LENS  
Light Source: (168) 90 CRI LEDS TUNED TO 5500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2305.0 lumens  
Efficiency: N/A  
Efficacy: 74.4 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

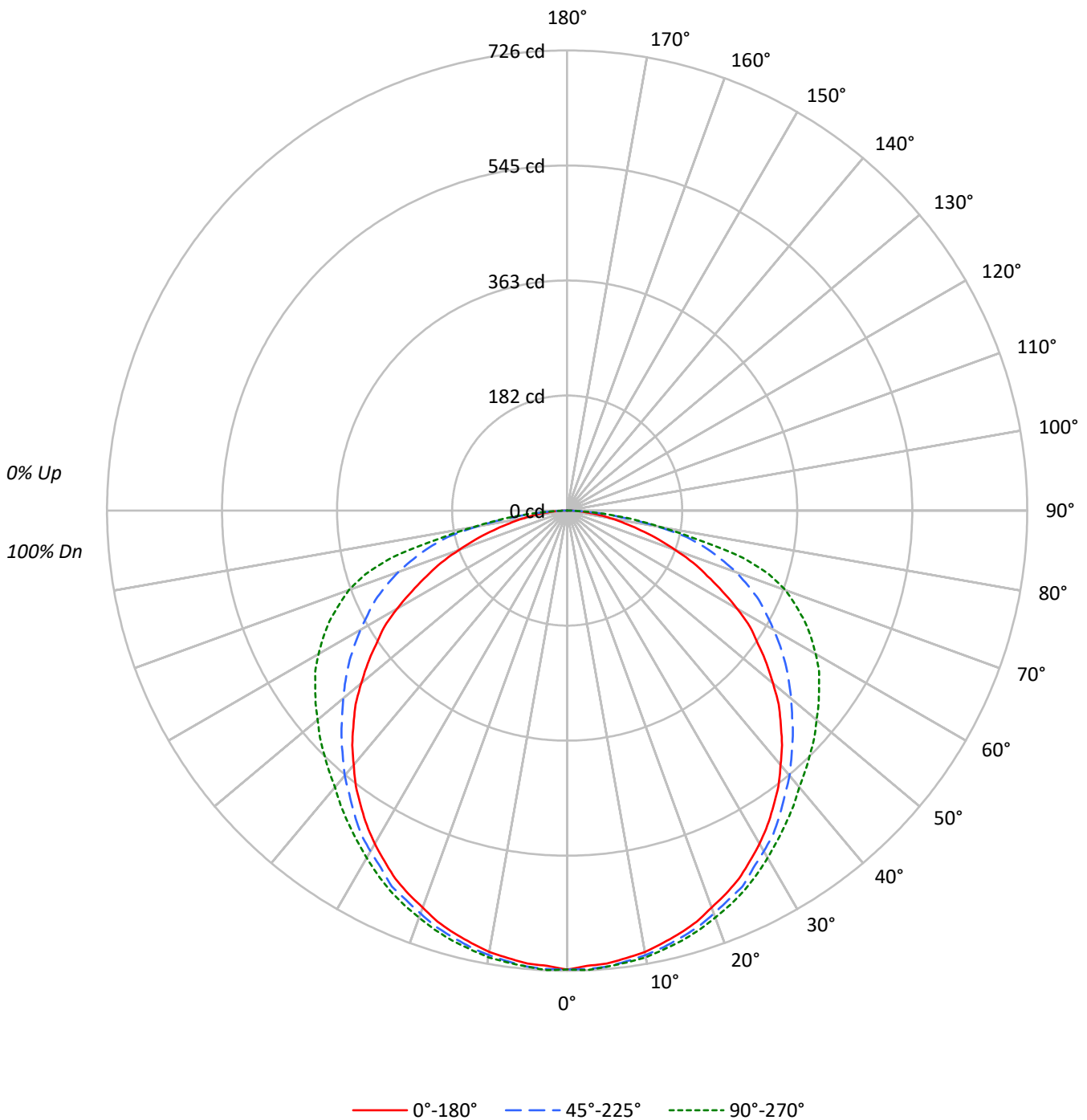
Input Watts (W): 30.969  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	1948	1948	1948
5°	1938	1951	1951
10°	1932	1946	1955
15°	1923	1941	1956
20°	1908	1938	1957
25°	1903	1943	1964
30°	1886	1928	1965
35°	1866	1922	1978
40°	1841	1918	2001
45°	1813	1917	2065
50°	1775	1931	2151
55°	1727	1973	2275
60°	1670	2026	2436
65°	1555	2127	2634
70°	1427	2228	2882
75°	1252	2345	2980
80°	1077	2233	2338
85°	942	1624	1782



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	68.5	3.0
10°-20°	196.6	8.5
20°-30°	300.0	13.0
30°-40°	366.3	15.9
40°-50°	391.7	17.0
50°-60°	378.1	16.4
60°-70°	325.5	14.1
70°-80°	220.2	9.6
80°-90°	58.1	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°	565.2	24.5
0°-40°	931.5	40.4
0°-60°	1701.3	73.8
0°-90°	2305.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2305.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	724	724	724	724	724	
5°	717	719	722	722	722	68
15°	690	692	697	700	702	195
25°	641	644	654	658	661	295
35°	568	573	585	597	602	355
45°	476	485	504	529	543	368
55°	368	380	420	463	485	330
65°	244	268	334	387	414	243
75°	120	159	226	271	287	129
85°	30	42	53	54	58	34
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	724.0	724.0	724.0	724.0	724.0
2.5°	719.0	720.6	724.0	724.0	725.7
5°	717.3	719.0	722.3	722.3	722.3
7.5°	712.2	713.9	717.3	719.0	719.0
10°	707.1	708.8	712.2	713.9	715.6
12.5°	698.6	700.3	705.4	708.8	708.8
15°	690.1	691.8	696.9	700.3	702.0
17.5°	680.0	683.3	688.4	691.8	693.5
20°	666.4	669.8	676.6	681.6	683.3
22.5°	654.5	657.9	664.7	669.8	673.2
25°	641.0	644.3	654.5	657.9	661.3
27.5°	624.0	627.4	635.9	642.6	647.7
30°	607.0	610.4	620.6	629.1	632.5
32.5°	588.4	593.5	605.3	612.1	617.2
35°	568.0	573.1	585.0	596.9	602.0
37.5°	547.7	552.8	564.6	579.9	586.7
40°	524.0	530.7	546.0	566.3	569.7
42.5°	501.9	510.4	524.0	547.7	556.2
45°	476.5	485.0	503.6	529.0	542.6
47.5°	452.7	461.2	481.6	512.1	529.0
50°	423.9	435.8	461.2	496.8	513.8
52.5°	396.8	407.0	440.9	479.9	500.2
55°	368.0	379.8	420.5	462.9	485.0
57.5°	342.5	352.7	398.5	446.0	471.4
60°	310.3	323.9	376.4	427.3	452.7
62.5°	276.4	296.7	354.4	407.0	434.1
65°	244.2	267.9	334.0	386.6	413.7
67.5°	215.3	240.8	308.6	364.6	390.0
70°	181.4	213.7	283.2	337.4	366.3
72.5°	150.9	186.5	254.3	308.6	334.0
75°	120.4	159.4	225.5	271.3	286.6
77.5°	93.3	130.6	193.3	206.9	208.6
80°	69.5	103.4	144.1	145.8	150.9
82.5°	47.5	72.9	93.3	101.7	103.4
85°	30.5	42.4	52.6	54.3	57.7
87.5°	13.6	15.3	18.7	17.0	17.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)