

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: P277248

Luminaire Tested: **22CZ2-39HE-UNV-L82765-W2A1-U-2700K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P277248  
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: 22CZ2-39HE-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: 3368.0 lumens  
Efficiency: N/A  
Efficacy: 111.8 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

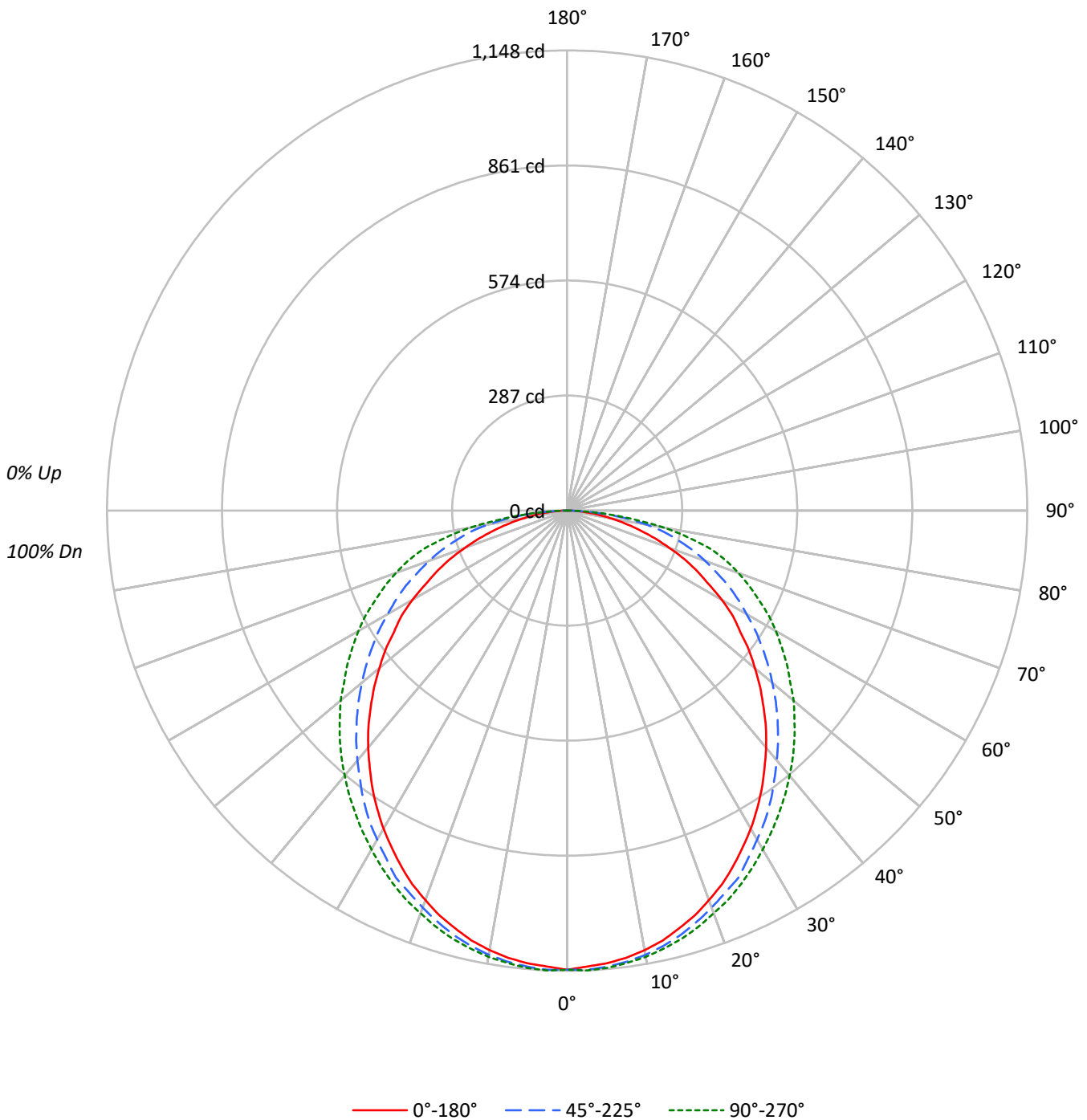
Input Watts (W): 30.132  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102
1	108	103	98	94	105	101	96	93	96	93	90	92	90	87	89	86	84
2	98	89	82	76	95	87	81	75	84	78	73	80	76	71	77	73	70
3	89	78	69	63	86	76	68	62	73	66	61	70	65	60	68	63	59
4	81	69	60	53	79	67	59	52	65	57	52	63	56	51	60	55	50
5	75	61	52	45	72	60	52	45	58	50	44	56	49	44	54	48	44
6	69	55	46	39	67	54	46	39	52	45	39	51	44	39	49	43	38
7	64	50	41	35	62	49	41	35	48	40	34	46	39	34	45	39	34
8	59	46	37	31	58	45	37	31	44	36	31	42	35	30	41	35	30
9	56	42	34	28	54	41	33	28	40	33	28	39	32	27	38	32	27
10	52	39	31	25	51	38	30	25	37	30	25	36	30	25	35	29	25

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

	0°	45°	90°
0°	3082	3082	3082
5°	3062	3085	3093
10°	3043	3075	3089
15°	3006	3052	3080
20°	2961	3018	3061
25°	2908	3002	3051
30°	2848	2946	3033
35°	2782	2907	3027
40°	2713	2858	3033
45°	2636	2826	3052
50°	2560	2796	3087
55°	2472	2784	3141
60°	2399	2783	3238
65°	2280	2828	3356
70°	2125	2882	3573
75°	1947	2981	3859
80°	1695	3107	3801
85°	1485	2763	3020



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	108.3	3.2
10°-20°	308.5	9.2
20°-30°	463.1	13.7
30°-40°	553.3	16.4
40°-50°	575.4	17.1
50°-60°	533.3	15.8
60°-70°	437.4	13.0
70°-80°	295.7	8.8
80°-90°	92.9	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°	879.9	26.1
0°-40°	1433.2	42.6
0°-60°	2541.9	75.5
0°-90°	3368.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3368.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1145	1145	1145	1145	1145	
5°	1134	1135	1142	1144	1145	108
15°	1079	1084	1096	1102	1105	304
25°	980	988	1011	1022	1028	451
35°	847	858	885	912	921	529
45°	693	706	742	786	802	535
55°	527	544	593	646	670	474
65°	358	378	444	502	527	354
75°	187	219	287	345	371	199
85°	48	66	90	99	98	55
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1145.2	1145.2	1145.2	1145.2	1145.2
2.5°	1138.6	1141.9	1146.8	1148.5	1148.5
5°	1133.6	1135.2	1141.9	1143.5	1145.2
7.5°	1125.3	1128.6	1135.2	1136.9	1138.6
10°	1113.7	1117.0	1125.3	1128.6	1130.3
12.5°	1098.8	1102.1	1112.0	1117.0	1118.7
15°	1078.9	1083.9	1095.5	1102.1	1105.4
17.5°	1059.0	1064.0	1075.6	1085.5	1088.8
20°	1034.1	1045.7	1054.0	1067.3	1068.9
22.5°	1009.3	1015.9	1030.8	1044.1	1050.7
25°	979.5	987.7	1010.9	1022.5	1027.5
27.5°	948.0	959.6	977.8	996.0	1002.7
30°	916.5	924.8	948.0	969.5	976.1
32.5°	881.7	893.3	918.1	939.7	949.6
35°	846.9	858.5	885.0	911.5	921.4
37.5°	808.8	822.0	848.5	880.0	893.3
40°	772.3	782.2	813.7	851.8	863.4
42.5°	734.2	745.8	778.9	820.4	833.6
45°	692.7	706.0	742.5	785.6	802.1
47.5°	653.0	666.2	706.0	749.1	769.0
50°	611.5	628.1	667.9	717.6	737.5
52.5°	571.8	586.7	631.4	682.8	701.0
55°	527.0	543.6	593.3	646.3	669.5
57.5°	490.6	502.2	556.8	611.5	634.7
60°	445.8	460.7	517.1	575.1	601.6
62.5°	397.7	422.6	480.6	540.3	566.8
65°	358.0	377.9	444.2	502.2	527.0
67.5°	316.5	338.1	402.7	464.0	492.2
70°	270.1	298.3	366.3	427.6	454.1
72.5°	228.7	258.5	328.1	387.8	416.0
75°	187.3	218.8	286.7	344.7	371.2
77.5°	147.5	182.3	248.6	293.3	309.9
80°	109.4	142.5	200.5	232.0	245.3
82.5°	76.2	104.4	147.5	164.1	167.4
85°	48.1	66.3	89.5	99.4	97.8
87.5°	21.5	26.5	33.1	36.5	34.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)