

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: P277311

Luminaire Tested: **22CZ2-44HE-UNV-L92765-W2A1-U-2700K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P277311  
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: 22CZ2-44HE-UNV-L92765-W2A1-U-2700K  
Description: CRUZE 2.0 2x2 TUNABLE WHITE LED TROFFER  
WITH RIBBED LENS  
Light Source: (168) 90 CRI LEDS TUNED TO 2700K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3227.0 lumens  
Efficiency: N/A  
Efficacy: 93.5 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

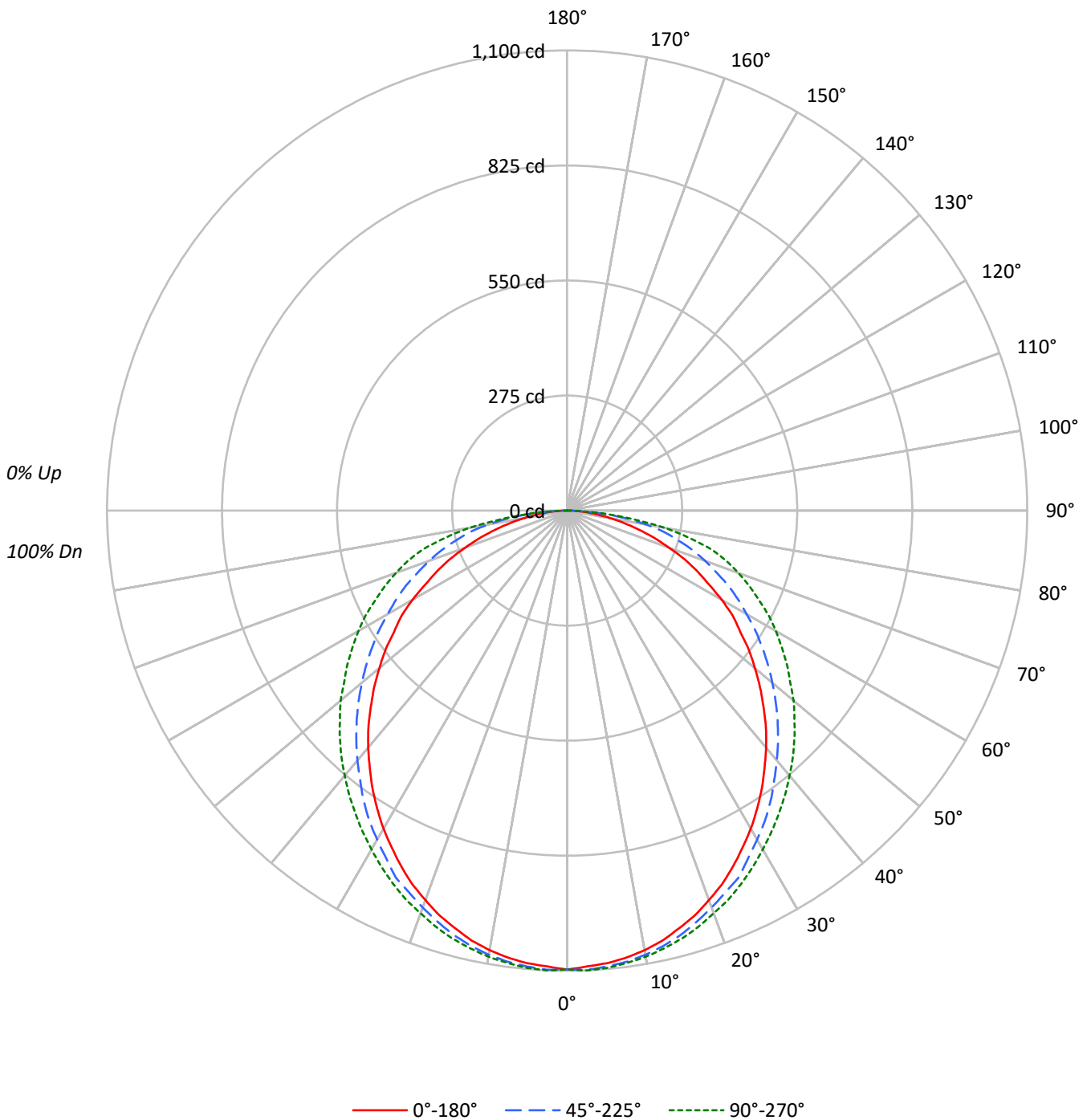
Input Watts (W): 34.503  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Luminous Intensity Polar Plot





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**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20				20				20			20			20			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	101	96	93	96	93	90	92	90	87	89	86	84	82
2	98	89	82	76	95	87	81	75	84	78	73	80	76	71	77	73	70	68
3	89	78	69	63	86	76	68	62	73	66	61	70	65	60	68	63	59	56
4	81	69	60	53	79	67	59	52	65	57	52	63	56	51	60	55	50	48
5	75	61	52	45	72	60	52	45	58	50	44	56	49	44	54	48	44	41
6	69	55	46	39	67	54	46	39	52	45	39	51	44	39	49	43	38	36
7	64	50	41	35	62	49	41	35	48	40	34	46	39	34	45	39	34	32
8	59	46	37	31	58	45	37	31	44	36	31	42	35	30	41	35	30	28
9	56	42	34	28	54	41	33	28	40	33	28	39	32	27	38	32	27	25
10	52	39	31	25	51	38	30	25	37	30	25	36	30	25	35	29	25	23

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

	0°	45°	90°
0°	2953	2953	2953
5°	2934	2955	2964
10°	2916	2946	2959
15°	2880	2924	2951
20°	2838	2892	2933
25°	2786	2876	2923
30°	2728	2822	2906
35°	2666	2785	2900
40°	2599	2739	2906
45°	2526	2707	2925
50°	2453	2679	2958
55°	2369	2667	3010
60°	2299	2666	3102
65°	2184	2710	3216
70°	2036	2761	3423
75°	1865	2856	3698
80°	1624	2977	3642
85°	1420	2646	2893



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	103.8	3.2
10°-20°	295.6	9.2
20°-30°	443.7	13.7
30°-40°	530.2	16.4
40°-50°	551.3	17.1
50°-60°	511.0	15.8
60°-70°	419.1	13.0
70°-80°	283.3	8.8
80°-90°	89.0	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°	843.0	26.1
0°-40°	1373.2	42.6
0°-60°	2435.5	75.5
0°-90°	3227.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3227.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1097	1097	1097	1097	1097	
5°	1086	1088	1094	1096	1097	103
15°	1034	1038	1050	1056	1059	292
25°	938	946	969	980	984	432
35°	811	822	848	873	883	507
45°	664	676	711	753	768	513
55°	505	521	568	619	642	454
65°	343	362	426	481	505	339
75°	179	210	275	330	356	190
85°	46	64	86	95	94	52
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1097.2	1097.2	1097.2	1097.2	1097.2
2.5°	1090.9	1094.1	1098.8	1100.4	1100.4
5°	1086.1	1087.7	1094.1	1095.7	1097.2
7.5°	1078.2	1081.4	1087.7	1089.3	1090.9
10°	1067.1	1070.2	1078.2	1081.4	1082.9
12.5°	1052.8	1056.0	1065.5	1070.2	1071.8
15°	1033.7	1038.5	1049.6	1056.0	1059.1
17.5°	1014.7	1019.4	1030.5	1040.1	1043.3
20°	990.9	1002.0	1009.9	1022.6	1024.2
22.5°	967.0	973.4	987.7	1000.4	1006.7
25°	938.4	946.4	968.6	979.7	984.5
27.5°	908.3	919.4	936.9	954.3	960.7
30°	878.1	886.0	908.3	928.9	935.3
32.5°	844.8	855.9	879.7	900.3	909.9
35°	811.4	822.5	847.9	873.3	882.9
37.5°	774.9	787.6	813.0	843.2	855.9
40°	740.0	749.5	779.7	816.2	827.3
42.5°	703.4	714.6	746.3	786.0	798.7
45°	663.7	676.4	711.4	752.7	768.5
47.5°	625.6	638.3	676.4	717.7	736.8
50°	585.9	601.8	639.9	687.6	706.6
52.5°	547.8	562.1	605.0	654.2	671.7
55°	505.0	520.8	568.5	619.3	641.5
57.5°	470.0	481.1	533.5	585.9	608.2
60°	427.1	441.4	495.4	551.0	576.4
62.5°	381.1	404.9	460.5	517.7	543.1
65°	343.0	362.0	425.6	481.1	505.0
67.5°	303.3	323.9	385.9	444.6	471.6
70°	258.8	285.8	350.9	409.7	435.1
72.5°	219.1	247.7	314.4	371.6	398.6
75°	179.4	209.6	274.7	330.3	355.7
77.5°	141.3	174.7	238.2	281.1	296.9
80°	104.8	136.6	192.1	222.3	235.0
82.5°	73.0	100.0	141.3	157.2	160.4
85°	46.0	63.5	85.7	95.3	93.7
87.5°	20.6	25.4	31.8	34.9	33.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)