

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: P259455

Luminaire Tested: **22CZ-LD5-29-S-UNV-L82765-W2A1-U-3000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P259455  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P25712)  
Test Lab: INNOVATION CENTER-P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 22CZ-LD5-29-S-UNV-L82765-W2A1-U-3000K  
Description: CRUZE 2x2 TUNABLE WHITE LED TROFFER WITH SMOOTH LENS  
Light Source: (168) 80 CRI LEDS TUNED AT 3000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2745.0 lumens  
Efficiency: N/A  
Efficacy: 133.0 lumens/watt  
Spacing Criteria (0/90/45): 1.18 / 1.24 / 1.33  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct

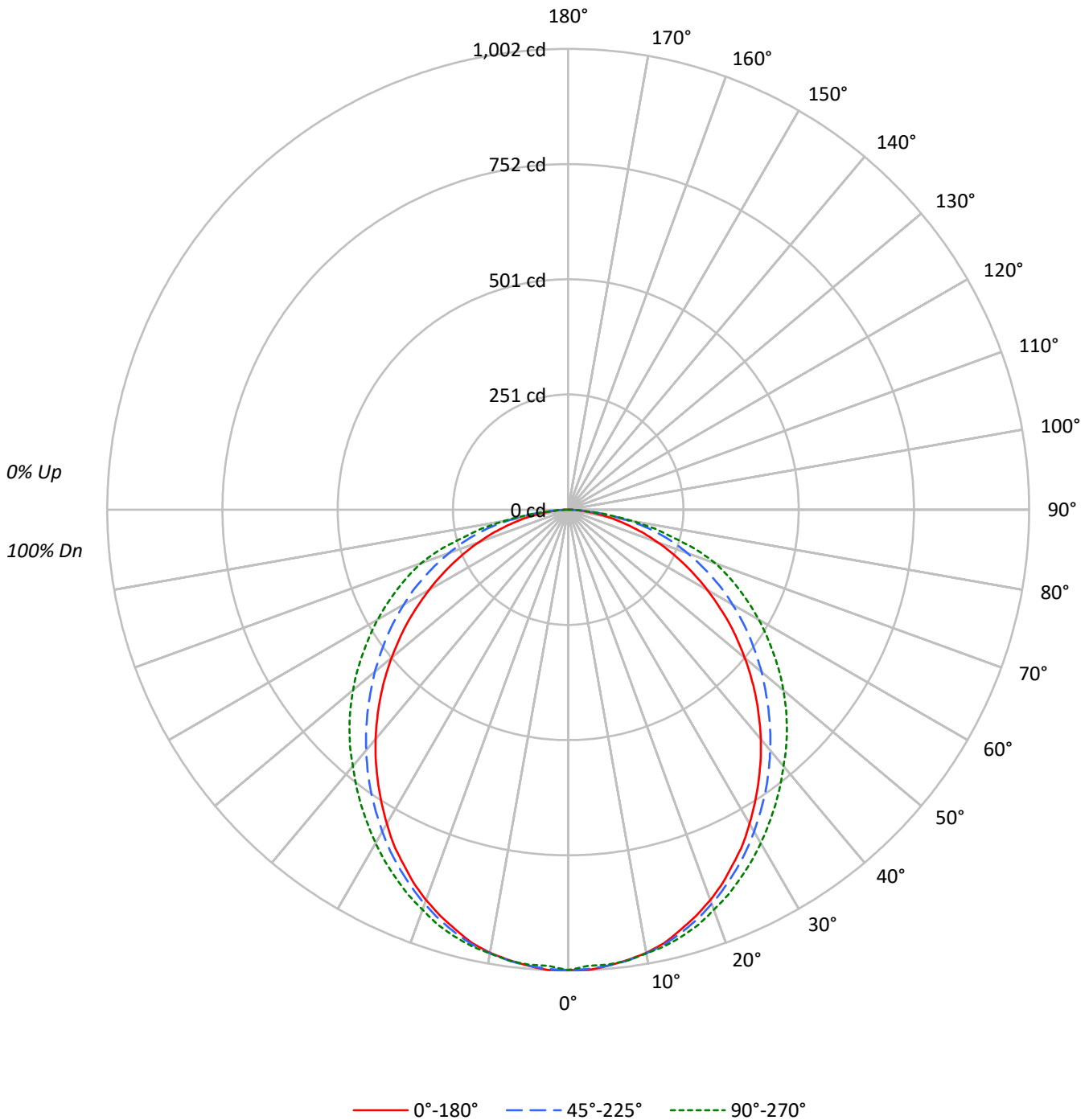
Input Watts (W): 20.646  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	109	104	99	95	106	101	97	94	97	94	91	93	91	88	90	87	85	83
2	99	90	83	77	96	88	82	77	85	79	75	81	77	73	78	75	71	69
3	90	79	71	64	87	78	70	64	75	68	63	72	66	62	69	64	60	58
4	82	70	61	54	80	69	61	54	66	59	53	64	58	53	62	56	52	50
5	76	63	54	47	74	62	53	47	59	52	46	57	51	46	56	50	45	43
6	70	56	47	41	68	56	47	41	54	46	40	52	45	40	50	44	40	38
7	65	51	42	36	63	50	42	36	49	41	36	47	41	36	46	40	35	33
8	60	47	38	32	59	46	38	32	45	37	32	43	37	32	42	36	32	30
9	56	43	35	29	55	42	34	29	41	34	29	40	34	29	39	33	29	27
10	53	40	32	26	52	39	32	26	38	31	26	37	31	26	36	30	26	24

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

	0°	45°	90°
0°	2693	2693	2693
5°	2689	2689	2682
10°	2673	2677	2677
15°	2634	2652	2674
20°	2586	2613	2651
25°	2521	2564	2627
30°	2450	2511	2601
35°	2369	2456	2577
40°	2288	2399	2557
45°	2198	2343	2559
50°	2097	2296	2555
55°	1998	2258	2555
60°	1880	2221	2576
65°	1763	2191	2611
70°	1629	2168	2677
75°	1467	2152	2481
80°	1288	2002	2166
85°	1059	1507	1343



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	94.5	3.4
10°-20°	268.5	9.8
20°-30°	398.7	14.5
30°-40°	469.3	17.1
40°-50°	478.5	17.4
50°-60°	431.5	15.7
60°-70°	339.9	12.4
70°-80°	209.7	7.6
80°-90°	54.4	2.0
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°	761.7	27.7
0°-40°	1231.0	44.8
0°-60°	2141.0	78.0
0°-90°	2745.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2745.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1001	1001	1001	1001	1001	
5°	995	997	995	994	993	94
15°	945	949	952	957	960	267
25°	849	854	864	878	885	391
35°	721	729	748	771	784	451
45°	578	587	616	653	672	445
55°	426	440	481	525	544	380
65°	277	297	344	388	410	274
75°	141	165	207	231	239	151
85°	34	44	49	46	44	40
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1000.7	1000.7	1000.7	1000.7	1000.7
2.5°	1002.0	1002.0	999.4	996.8	992.8
5°	995.4	996.8	995.4	994.1	992.8
7.5°	987.5	988.8	988.8	988.8	988.8
10°	978.3	979.6	979.6	979.6	979.6
12.5°	965.1	966.4	967.8	969.1	971.7
15°	945.3	949.3	951.9	957.2	959.8
17.5°	925.6	929.5	933.5	940.1	945.3
20°	903.1	905.8	912.4	920.3	925.6
22.5°	878.1	882.1	888.6	899.2	907.1
25°	849.1	854.4	863.6	878.1	884.7
27.5°	821.4	825.4	837.2	853.0	862.3
30°	788.4	793.7	808.2	828.0	837.2
32.5°	755.5	762.1	777.9	800.3	810.9
35°	721.2	729.1	747.6	771.3	784.5
37.5°	686.9	694.8	715.9	742.3	756.8
40°	651.3	659.2	683.0	712.0	727.8
42.5°	614.4	623.6	650.0	683.0	701.4
45°	577.5	586.7	615.7	652.6	672.4
47.5°	539.3	549.8	581.4	622.3	642.1
50°	501.0	512.9	548.5	590.7	610.4
52.5°	462.8	476.0	514.2	557.7	578.8
55°	425.9	440.4	481.2	524.7	544.5
57.5°	386.3	403.5	447.0	489.2	511.6
60°	349.4	367.9	412.7	454.9	478.6
62.5°	312.5	332.3	379.7	421.9	444.3
65°	276.9	296.7	344.1	387.6	410.0
67.5°	241.3	263.7	309.8	353.3	375.8
70°	207.0	230.7	275.6	317.8	340.2
72.5°	174.0	197.8	242.6	282.2	295.3
75°	141.1	164.8	207.0	230.7	238.6
77.5°	110.8	133.2	170.1	184.6	195.1
80°	83.1	102.8	129.2	138.4	139.8
82.5°	56.7	73.8	89.7	91.0	89.7
85°	34.3	43.5	48.8	46.1	43.5
87.5°	15.8	17.1	15.8	10.5	6.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)