

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: P277549

Luminaire Tested: **22CZ2-20HE-RDP-UNV-L82765-W2A1-U-3000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P277549  
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: 22CZ2-20HE-RDP-UNV-L82765-W2A1-U-3000K  
Description: CRUZE 2.0 2x2 TUNABLE WHITE LED TROFFER WITH RDP LENS  
Light Source: (168) 80 CRI LEDS TUNED TO 3000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1272.0 lumens  
Efficiency: N/A  
Efficacy: 82.4 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

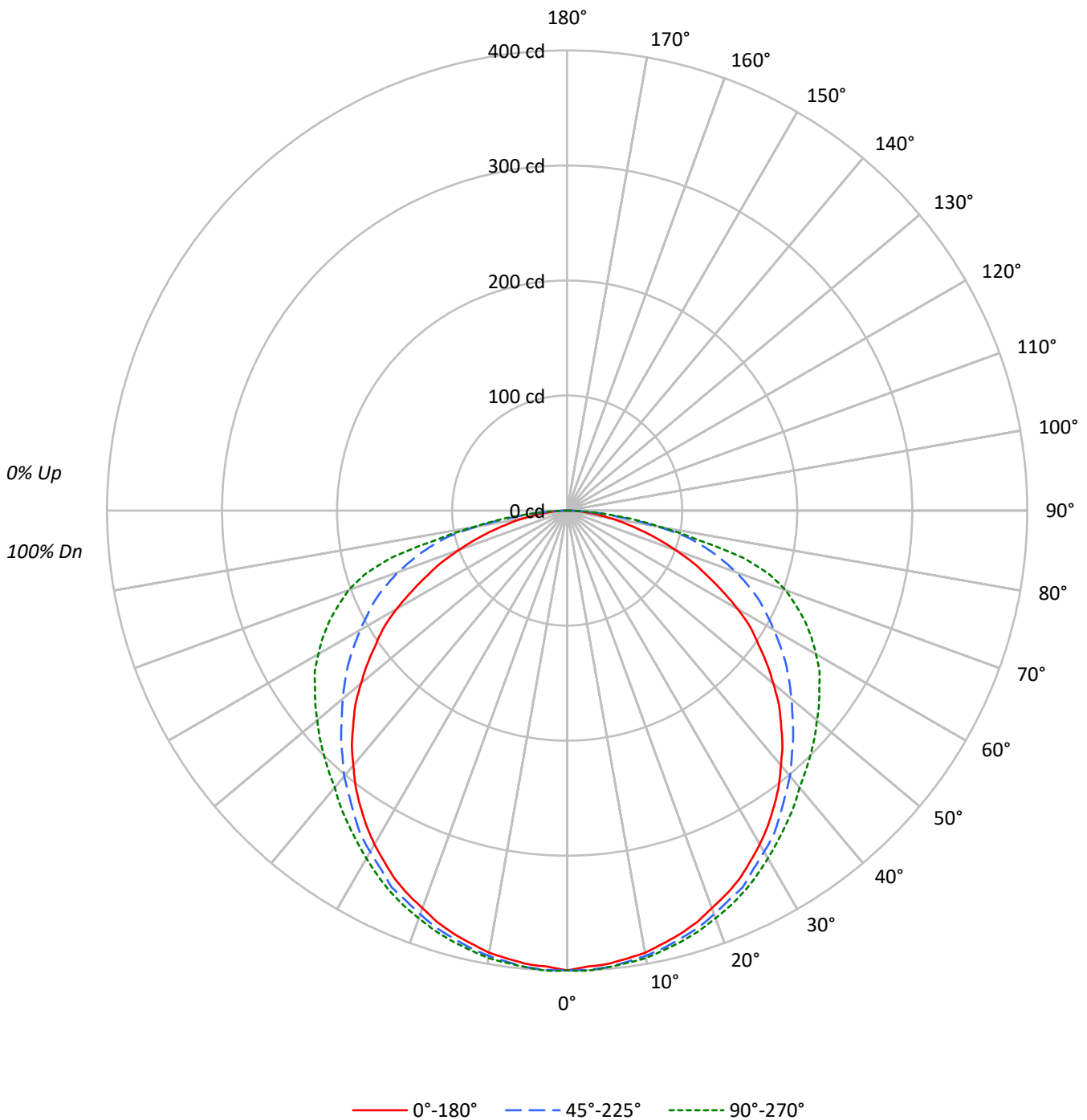
Input Watts (W): 15.438  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	1075	1075	1075
5°	1069	1077	1077
10°	1066	1074	1079
15°	1061	1071	1079
20°	1053	1069	1080
25°	1050	1072	1083
30°	1041	1064	1084
35°	1030	1060	1091
40°	1016	1058	1104
45°	1000	1058	1139
50°	979	1065	1187
55°	953	1089	1255
60°	921	1118	1344
65°	858	1174	1454
70°	788	1230	1590
75°	690	1294	1644
80°	595	1232	1291
85°	519	895	982



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	37.8	3.0
10°-20°	108.5	8.5
20°-30°	165.6	13.0
30°-40°	202.2	15.9
40°-50°	216.1	17.0
50°-60°	208.6	16.4
60°-70°	179.6	14.1
70°-80°	121.5	9.6
80°-90°	32.1	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°	311.9	24.5
0°-40°	514.0	40.4
0°-60°	938.8	73.8
0°-90°	1272.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1272.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	400	400	400	400	400	
5°	396	397	399	399	399	38
15°	381	382	385	386	387	107
25°	354	356	361	363	365	163
35°	314	316	323	329	332	196
45°	263	268	278	292	299	203
55°	203	210	232	256	268	182
65°	135	148	184	213	228	134
75°	66	88	124	150	158	71
85°	17	23	29	30	32	19
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	399.6	399.6	399.6	399.6	399.6
2.5°	396.8	397.7	399.6	399.6	400.5
5°	395.8	396.8	398.6	398.6	398.6
7.5°	393.0	393.9	395.8	396.8	396.8
10°	390.2	391.1	393.0	393.9	394.9
12.5°	385.5	386.5	389.3	391.1	391.1
15°	380.8	381.8	384.6	386.5	387.4
17.5°	375.2	377.1	379.9	381.8	382.7
20°	367.7	369.6	373.4	376.2	377.1
22.5°	361.2	363.1	366.8	369.6	371.5
25°	353.7	355.6	361.2	363.1	364.9
27.5°	344.3	346.2	350.9	354.6	357.4
30°	335.0	336.9	342.5	347.2	349.0
32.5°	324.7	327.5	334.1	337.8	340.6
35°	313.5	316.3	322.8	329.4	332.2
37.5°	302.2	305.0	311.6	320.0	323.8
40°	289.1	292.9	301.3	312.5	314.4
42.5°	277.0	281.7	289.1	302.2	306.9
45°	262.9	267.6	277.9	291.9	299.4
47.5°	249.8	254.5	265.7	282.6	291.9
50°	233.9	240.5	254.5	274.2	283.5
52.5°	219.0	224.6	243.3	264.8	276.0
55°	203.1	209.6	232.1	255.5	267.6
57.5°	189.0	194.6	219.9	246.1	260.1
60°	171.2	178.7	207.7	235.8	249.8
62.5°	152.5	163.8	195.6	224.6	239.5
65°	134.7	147.8	184.3	213.3	228.3
67.5°	118.8	132.9	170.3	201.2	215.2
70°	100.1	117.9	156.3	186.2	202.1
72.5°	83.3	102.9	140.4	170.3	184.3
75°	66.4	88.0	124.5	149.7	158.1
77.5°	51.5	72.1	106.7	114.2	115.1
80°	38.4	57.1	79.5	80.5	83.3
82.5°	26.2	40.2	51.5	56.1	57.1
85°	16.8	23.4	29.0	29.9	31.8
87.5°	7.5	8.4	10.3	9.4	9.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)