

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: P277522

Luminaire Tested: **22CZ2-20HE-RDP-UNV-L93050-W2A1-U-5000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P277522  
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-L93050-W2A1-U-5000K  
Description: CRUZE 2.0 2x2 TUNABLE WHITE LED TROFFER WITH RDP LENS  
Light Source: (168) 90 CRI LEDS TUNED TO 5000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1258.0 lumens  
Efficiency: N/A  
Efficacy: 77.7 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

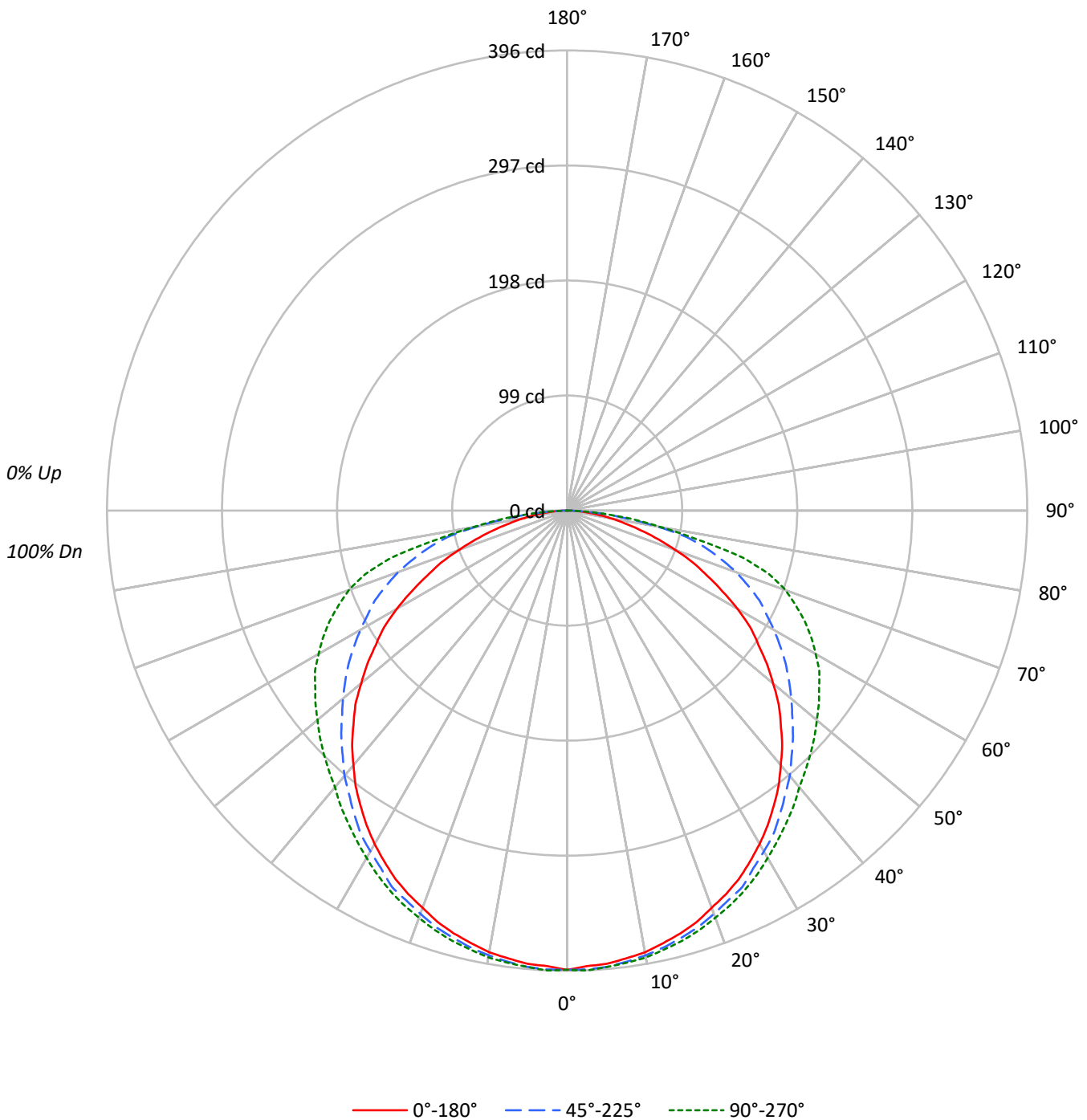
Input Watts (W): 16.183302  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	1063	1063	1063
5°	1058	1065	1065
10°	1054	1062	1067
15°	1049	1060	1067
20°	1042	1057	1068
25°	1039	1061	1072
30°	1029	1052	1073
35°	1018	1049	1079
40°	1005	1047	1092
45°	989	1046	1127
50°	969	1054	1174
55°	942	1077	1242
60°	912	1105	1330
65°	849	1161	1438
70°	779	1216	1573
75°	683	1280	1626
80°	587	1220	1277
85°	516	886	973



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	37.4	3.0
10°-20°	107.3	8.5
20°-30°	163.7	13.0
30°-40°	199.9	15.9
40°-50°	213.8	17.0
50°-60°	206.3	16.4
60°-70°	177.6	14.1
70°-80°	120.2	9.6
80°-90°	31.7	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°	308.4	24.5
0°-40°	508.4	40.4
0°-60°	928.5	73.8
0°-90°	1258.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1258.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	395	395	395	395	395	
5°	392	392	394	394	394	37
15°	377	378	380	382	383	106
25°	350	352	357	359	361	161
35°	310	313	319	326	328	194
45°	260	265	275	289	296	201
55°	201	207	230	253	265	180
65°	133	146	182	211	226	133
75°	66	87	123	148	156	70
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°	395.2	395.2	395.2	395.2	395.2
2.5°	392.4	393.3	395.2	395.2	396.1
5°	391.5	392.4	394.2	394.2	394.2
7.5°	388.7	389.6	391.5	392.4	392.4
10°	385.9	386.8	388.7	389.6	390.5
12.5°	381.3	382.2	385.0	386.8	386.8
15°	376.7	377.6	380.4	382.2	383.1
17.5°	371.1	372.9	375.7	377.6	378.5
20°	363.7	365.5	369.2	372.0	372.9
22.5°	357.2	359.1	362.8	365.5	367.4
25°	349.8	351.7	357.2	359.1	360.9
27.5°	340.6	342.4	347.0	350.7	353.5
30°	331.3	333.2	338.7	343.3	345.2
32.5°	321.1	323.9	330.4	334.1	336.9
35°	310.0	312.8	319.3	325.8	328.5
37.5°	298.9	301.7	308.2	316.5	320.2
40°	286.0	289.7	298.0	309.1	310.9
42.5°	273.9	278.6	286.0	298.9	303.5
45°	260.0	264.7	274.9	288.7	296.1
47.5°	247.1	251.7	262.8	279.5	288.7
50°	231.4	237.8	251.7	271.2	280.4
52.5°	216.6	222.1	240.6	261.9	273.0
55°	200.8	207.3	229.5	252.6	264.7
57.5°	186.9	192.5	217.5	243.4	257.3
60°	169.4	176.8	205.4	233.2	247.1
62.5°	150.8	162.0	193.4	222.1	236.9
65°	133.3	146.2	182.3	211.0	225.8
67.5°	117.5	131.4	168.4	199.0	212.8
70°	99.0	116.6	154.5	184.2	199.9
72.5°	82.4	101.8	138.8	168.4	182.3
75°	65.7	87.0	123.1	148.1	156.4
77.5°	50.9	71.3	105.5	112.9	113.8
80°	37.9	56.5	78.7	79.6	82.4
82.5°	25.9	39.8	50.9	55.5	56.5
85°	16.7	23.1	28.7	29.6	31.5
87.5°	7.4	8.3	10.2	9.3	9.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)