

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: P277526

Luminaire Tested: **22CZ2-24HE-RDP-UNV-L93050-W2A1-U-4500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P277526  
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: 22CZ2-24HE-RDP-UNV-L93050-W2A1-U-4500K  
Description: CRUZE 2.0 2x2 TUNABLE WHITE LED TROFFER WITH RDP LENS  
Light Source: (168) 90 CRI LEDS TUNED TO 4500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1420.0 lumens  
Efficiency: N/A  
Efficacy: 77.5 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

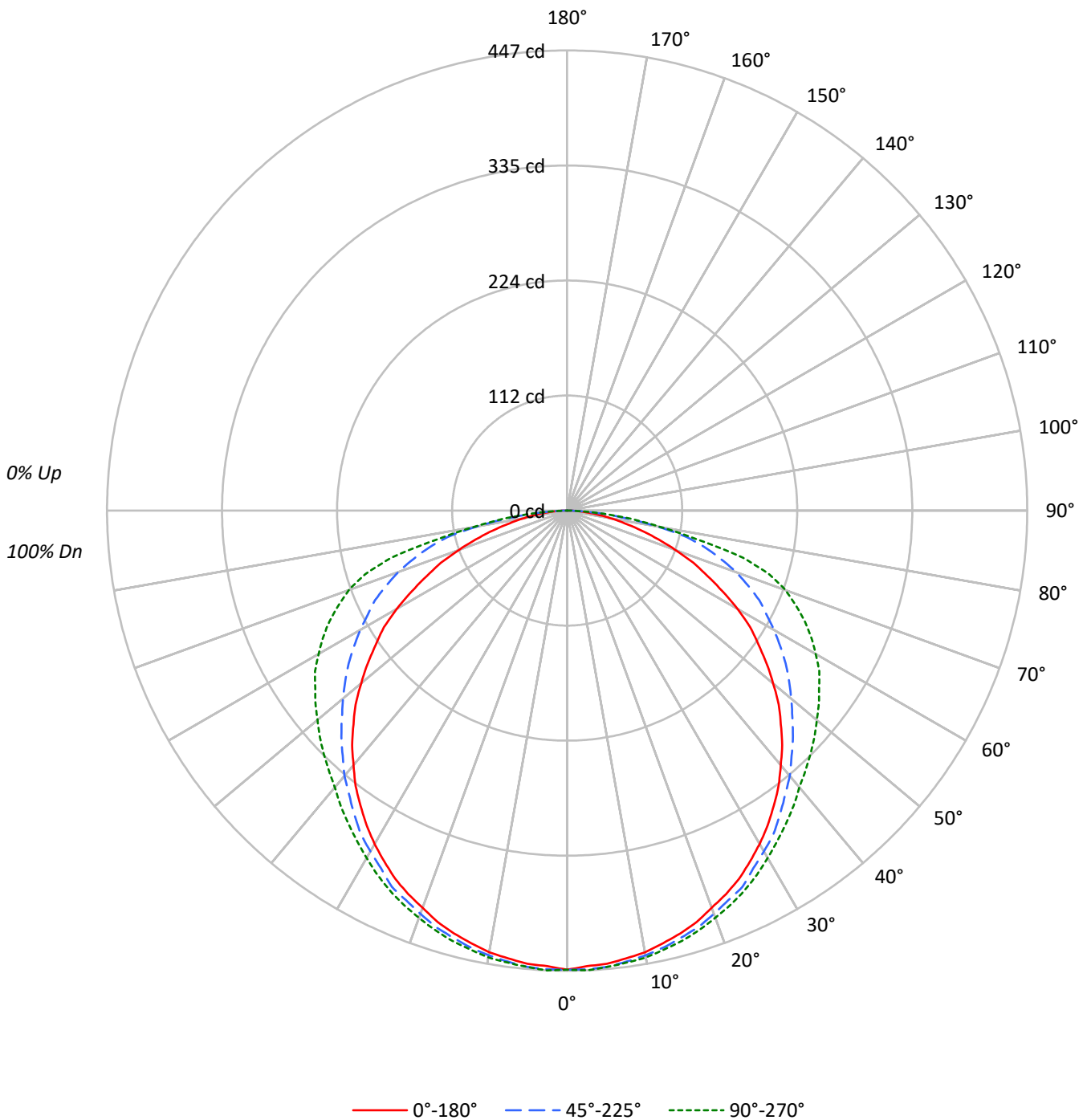
Input Watts (W): 18.315234  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	1200	1200	1200
5°	1194	1202	1202
10°	1190	1199	1204
15°	1185	1196	1205
20°	1176	1194	1206
25°	1173	1197	1210
30°	1162	1188	1211
35°	1149	1184	1218
40°	1134	1182	1233
45°	1117	1181	1272
50°	1093	1189	1325
55°	1064	1216	1402
60°	1029	1248	1501
65°	958	1310	1623
70°	880	1372	1775
75°	771	1444	1835
80°	663	1376	1441
85°	580	1000	1096



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	42.2	3.0
10°-20°	121.1	8.5
20°-30°	184.8	13.0
30°-40°	225.7	15.9
40°-50°	241.3	17.0
50°-60°	232.9	16.4
60°-70°	200.5	14.1
70°-80°	135.6	9.6
80°-90°	35.8	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°	348.2	24.5
0°-40°	573.8	40.4
0°-60°	1048.1	73.8
0°-90°	1420.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1420.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	446	446	446	446	446	
5°	442	443	445	445	445	42
15°	425	426	429	431	432	120
25°	395	397	403	405	407	182
35°	350	353	360	368	371	219
45°	294	299	310	326	334	227
55°	227	234	259	285	299	203
65°	150	165	206	238	255	150
75°	74	98	139	167	176	80
85°	19	26	32	33	36	21
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	446.0	446.0	446.0	446.0	446.0
2.5°	442.9	444.0	446.0	446.0	447.1
5°	441.9	442.9	445.0	445.0	445.0
7.5°	438.7	439.8	441.9	442.9	442.9
10°	435.6	436.6	438.7	439.8	440.8
12.5°	430.4	431.4	434.6	436.6	436.6
15°	425.2	426.2	429.3	431.4	432.5
17.5°	418.9	421.0	424.1	426.2	427.2
20°	410.5	412.6	416.8	419.9	421.0
22.5°	403.2	405.3	409.5	412.6	414.7
25°	394.9	397.0	403.2	405.3	407.4
27.5°	384.4	386.5	391.7	395.9	399.0
30°	374.0	376.1	382.3	387.5	389.6
32.5°	362.5	365.6	372.9	377.1	380.2
35°	349.9	353.1	360.4	367.7	370.8
37.5°	337.4	340.5	347.9	357.3	361.4
40°	322.8	327.0	336.4	348.9	351.0
42.5°	309.2	314.4	322.8	337.4	342.6
45°	293.5	298.8	310.2	325.9	334.3
47.5°	278.9	284.1	296.7	315.5	325.9
50°	261.2	268.5	284.1	306.1	316.5
52.5°	244.4	250.7	271.6	295.6	308.2
55°	226.7	234.0	259.1	285.2	298.8
57.5°	211.0	217.3	245.5	274.7	290.4
60°	191.2	199.5	231.9	263.2	278.9
62.5°	170.3	182.8	218.3	250.7	267.4
65°	150.4	165.0	205.8	238.2	254.9
67.5°	132.7	148.3	190.1	224.6	240.3
70°	111.8	131.6	174.4	207.9	225.6
72.5°	93.0	114.9	156.7	190.1	205.8
75°	74.2	98.2	138.9	167.1	176.5
77.5°	57.5	80.4	119.1	127.4	128.5
80°	42.8	63.7	88.8	89.8	93.0
82.5°	29.2	44.9	57.5	62.7	63.7
85°	18.8	26.1	32.4	33.4	35.5
87.5°	8.4	9.4	11.5	10.4	10.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)