

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: P277523

Luminaire Tested: **22CZ2-24HE-RDP-UNV-L93050-W2A1-U-3000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P277523  
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-3000K  
Description: CRUZE 2.0 2x2 TUNABLE WHITE LED TROFFER WITH RDP LENS  
Light Source: (168) 90 CRI LEDS TUNED TO 3000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1183.0 lumens  
Efficiency: N/A  
Efficacy: 65.8 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

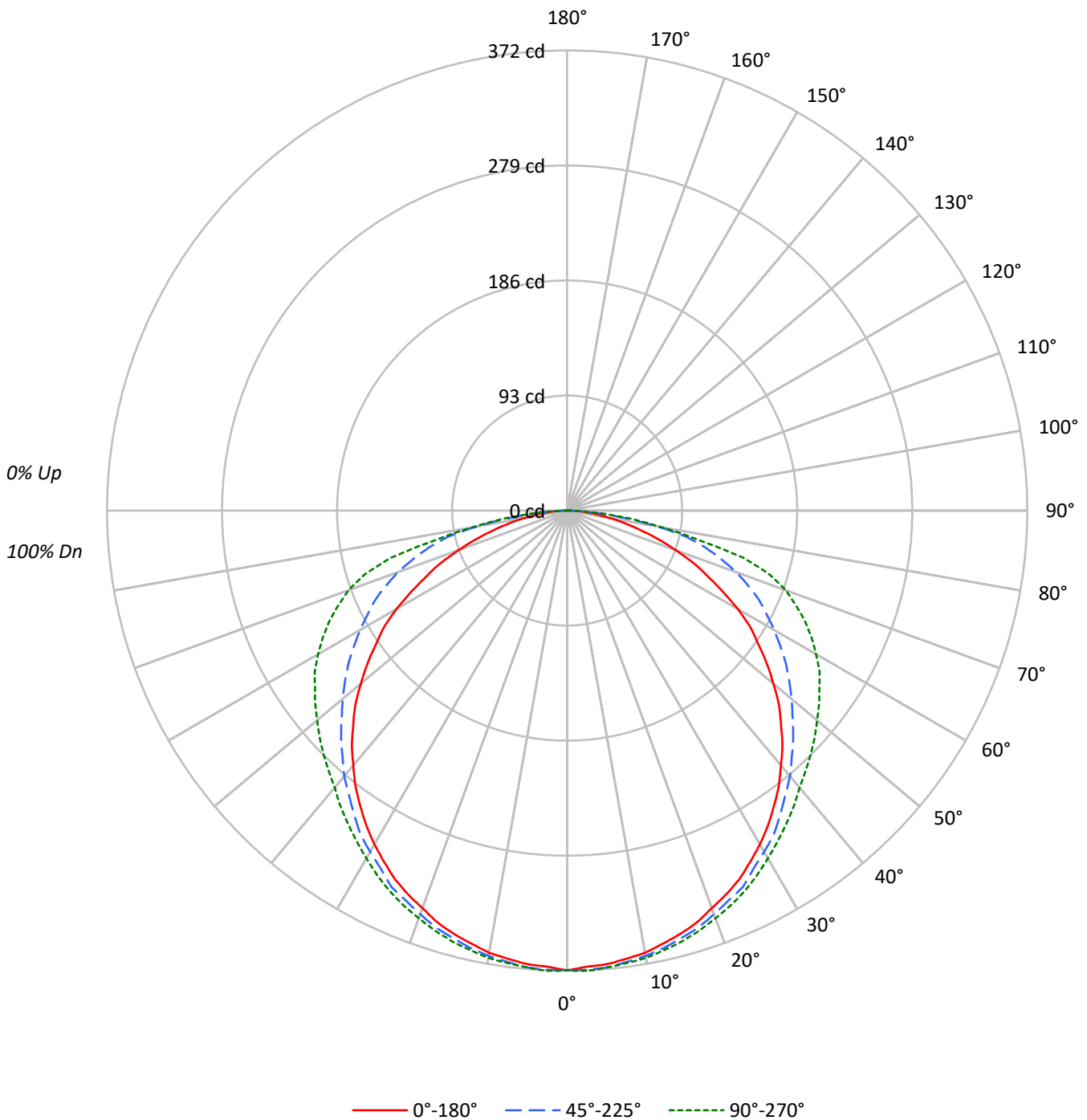
Input Watts (W): 17.981271  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P277523

CATALOG NUMBER: 22CZ2-24HE-RDP-UNV-L93050-W2A1-U-3000K

### Luminous Intensity Polar Plot





TEST NUMBER: P277523

CATALOG NUMBER: 22CZ2-24HE-RDP-UNV-L93050-W2A1-U-3000K

**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°	1000	1000	1000
5°	994	1001	1001
10°	992	999	1003
15°	987	997	1004
20°	979	994	1004
25°	977	997	1008
30°	968	990	1009
35°	958	986	1015
40°	945	984	1027
45°	930	984	1060
50°	911	991	1104
55°	886	1012	1168
60°	857	1040	1251
65°	798	1091	1352
70°	733	1143	1479
75°	643	1203	1529
80°	553	1147	1201
85°	485	834	914



TEST NUMBER: P277523

CATALOG NUMBER: 22CZ2-24HE-RDP-UNV-L93050-W2A1-U-3000K

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	35.2	3.0
10°-20°	100.9	8.5
20°-30°	154.0	13.0
30°-40°	188.0	15.9
40°-50°	201.0	17.0
50°-60°	194.0	16.4
60°-70°	167.0	14.1
70°-80°	113.0	9.6
80°-90°	29.8	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°	290.1	24.5
0°-40°	478.1	40.4
0°-60°	873.1	73.8
0°-90°	1183.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1183.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	372	372	372	372	372	
5°	368	369	371	371	371	35
15°	354	355	358	359	360	100
25°	329	331	336	338	339	151
35°	292	294	300	306	309	182
45°	244	249	258	272	278	189
55°	189	195	216	238	249	169
65°	125	138	171	198	212	125
75°	62	82	116	139	147	66
85°	16	22	27	28	30	18
90°	0	0	0	0	0	



TEST NUMBER: P277523

CATALOG NUMBER: 22CZ2-24HE-RDP-UNV-L93050-W2A1-U-3000K

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	371.6	371.6	371.6	371.6	371.6
2.5°	369.0	369.9	371.6	371.6	372.5
5°	368.1	369.0	370.7	370.7	370.7
7.5°	365.5	366.4	368.1	369.0	369.0
10°	362.9	363.8	365.5	366.4	367.2
12.5°	358.5	359.4	362.0	363.8	363.8
15°	354.2	355.1	357.7	359.4	360.3
17.5°	349.0	350.7	353.3	355.1	355.9
20°	342.0	343.8	347.2	349.8	350.7
22.5°	335.9	337.7	341.1	343.8	345.5
25°	329.0	330.7	335.9	337.7	339.4
27.5°	320.3	322.0	326.3	329.8	332.4
30°	311.6	313.3	318.5	322.9	324.6
32.5°	302.0	304.6	310.7	314.2	316.8
35°	291.5	294.1	300.2	306.3	308.9
37.5°	281.1	283.7	289.8	297.6	301.1
40°	268.9	272.4	280.2	290.7	292.4
42.5°	257.6	261.9	268.9	281.1	285.4
45°	244.5	248.9	258.5	271.5	278.5
47.5°	232.4	236.7	247.2	262.8	271.5
50°	217.6	223.7	236.7	255.0	263.7
52.5°	203.6	208.9	226.3	246.3	256.7
55°	188.8	194.9	215.8	237.6	248.9
57.5°	175.8	181.0	204.5	228.9	241.9
60°	159.3	166.2	193.2	219.3	232.4
62.5°	141.9	152.3	181.9	208.9	222.8
65°	125.3	137.5	171.4	198.4	212.3
67.5°	110.5	123.6	158.4	187.1	200.2
70°	93.1	109.7	145.3	173.2	188.0
72.5°	77.5	95.7	130.5	158.4	171.4
75°	61.8	81.8	115.7	139.2	147.1
77.5°	47.9	67.0	99.2	106.2	107.0
80°	35.7	53.1	74.0	74.8	77.5
82.5°	24.4	37.4	47.9	52.2	53.1
85°	15.7	21.8	27.0	27.8	29.6
87.5°	7.0	7.8	9.6	8.7	8.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)