

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: P230803

Luminaire Tested: **22CZ-LD5-24-SQP-UNV-L950-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P230803
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P25713)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ-LD5-24-SQP-UNV-L950-CD1-U
Description: CRUZE 2x2 LED TROFFER
WITH SQP LENS
Light Source: (84) 5000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1638.0 lumens
Efficiency: N/A
Efficacy: 83.6 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.31 / 1.41
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

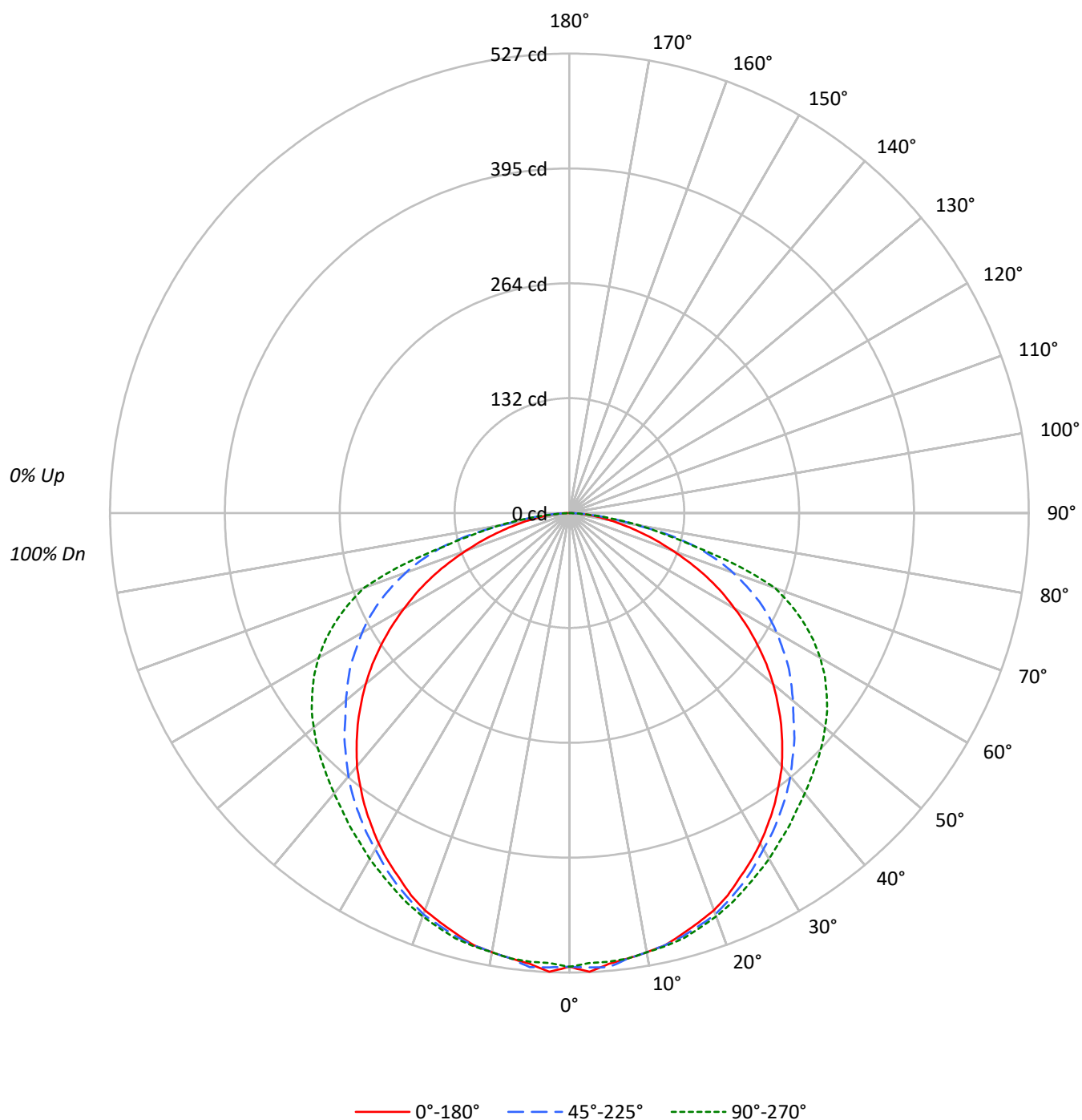
Input Watts (W): 19.6
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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				0
RW	70	50	30	10	70	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		100
1	108	103	99	95	105	101	97	93	97	93	90		93	90	87		83
2	98	89	82	76	95	87	81	75	84	78	73		80	76	71		68
3	89	78	69	62	86	76	68	62	73	66	61		70	64	59		56
4	81	68	59	52	79	67	58	52	64	57	51		62	56	50		47
5	74	61	52	45	72	60	51	44	58	50	44		56	49	43		41
6	68	55	45	39	66	54	45	39	52	44	38		50	43	38		35
7	63	49	40	34	62	49	40	34	47	39	34		45	39	33		31
8	59	45	36	30	57	44	36	30	43	35	30		42	35	30		28
9	55	41	33	27	54	41	33	27	39	32	27		38	32	27		25
10	51	38	30	24	50	37	30	24	36	29	24		35	29	24		22

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1400	1400	1400
5°	1402	1412	1395
10°	1397	1397	1397
15°	1393	1400	1407
20°	1388	1402	1410
25°	1371	1394	1413
30°	1360	1383	1423
35°	1346	1383	1442
40°	1332	1385	1475
45°	1307	1389	1530
50°	1278	1401	1603
55°	1235	1438	1689
60°	1178	1479	1787
65°	1110	1531	1887
70°	991	1571	1972
75°	860	1574	1561
80°	730	1164	1261
85°	630	784	707



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	49.4	3.0
10°-20°	141.9	8.7
20°-30°	216.2	13.2
30°-40°	264.5	16.1
40°-50°	284.6	17.4
50°-60°	275.7	16.8
60°-70°	233.6	14.3
70°-80°	141.2	8.6
80°-90°	31.0	1.9
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°	407.4	24.9
0°-40°	672.0	41.0
0°-60°	1232.3	75.2
0°-90°	1638.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1638.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	520	520	520	520	520	
5°	519	519	523	520	516	49
15°	500	501	502	504	505	141
25°	462	464	469	473	476	213
35°	410	412	421	432	439	256
45°	344	350	365	388	402	265
55°	263	275	307	342	360	235
65°	174	193	240	279	296	172
75°	83	112	151	154	150	89
85°	20	24	25	24	23	23
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	520.3	520.3	520.3	520.3	520.3
2.5°	526.6	525.4	521.5	519.0	516.5
5°	519.0	519.0	522.8	520.3	516.5
7.5°	515.2	515.2	515.2	521.5	515.2
10°	511.4	512.6	511.4	516.5	511.4
12.5°	507.6	507.6	507.6	508.8	508.8
15°	499.9	501.2	502.5	503.7	505.0
17.5°	492.3	493.6	496.1	497.4	498.6
20°	484.7	485.9	489.7	489.7	492.3
22.5°	474.5	474.5	479.6	480.8	484.7
25°	461.8	464.3	469.4	473.2	475.8
27.5°	450.3	452.9	457.9	463.0	466.8
30°	437.6	440.1	445.2	452.9	457.9
32.5°	423.6	426.1	433.8	442.7	447.8
35°	409.6	412.1	421.1	432.5	438.9
37.5°	394.3	398.2	408.3	421.1	428.7
40°	379.1	382.9	394.3	408.3	419.8
42.5°	361.3	366.4	379.1	398.2	410.9
45°	343.5	349.8	365.1	388.0	402.0
47.5°	324.4	330.7	348.5	377.8	393.1
50°	305.3	312.9	334.6	366.4	382.9
52.5°	284.9	292.6	320.6	354.9	372.7
55°	263.3	274.8	306.6	342.2	360.0
57.5°	241.7	254.4	290.0	328.2	347.3
60°	218.8	234.1	274.8	312.9	332.0
62.5°	197.2	213.7	258.2	296.4	315.5
65°	174.3	193.4	240.4	278.6	296.4
67.5°	150.1	174.3	220.1	257.0	274.8
70°	125.9	153.9	199.7	234.1	250.6
72.5°	104.3	133.6	176.8	206.1	206.1
75°	82.7	111.9	151.4	153.9	150.1
77.5°	63.6	91.6	118.3	108.1	110.7
80°	47.1	70.0	75.1	78.9	81.4
82.5°	31.8	47.1	48.3	50.9	50.9
85°	20.4	24.2	25.4	24.2	22.9
87.5°	8.9	10.2	7.6	5.1	3.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)