

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: P230615

Luminaire Tested: **22CZ-LD5-39SE-S-UNV-L950-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P230615
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P25712)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ-LD5-39SE-S-UNV-L950-CD1-U
Description: CRUZE 2x2 LED TROFFER
WITH SMOOTH LENS
Light Source: (56) 5000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3877.0 lumens
Efficiency: N/A
Efficacy: 111.1 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 1.24 / 1.33
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

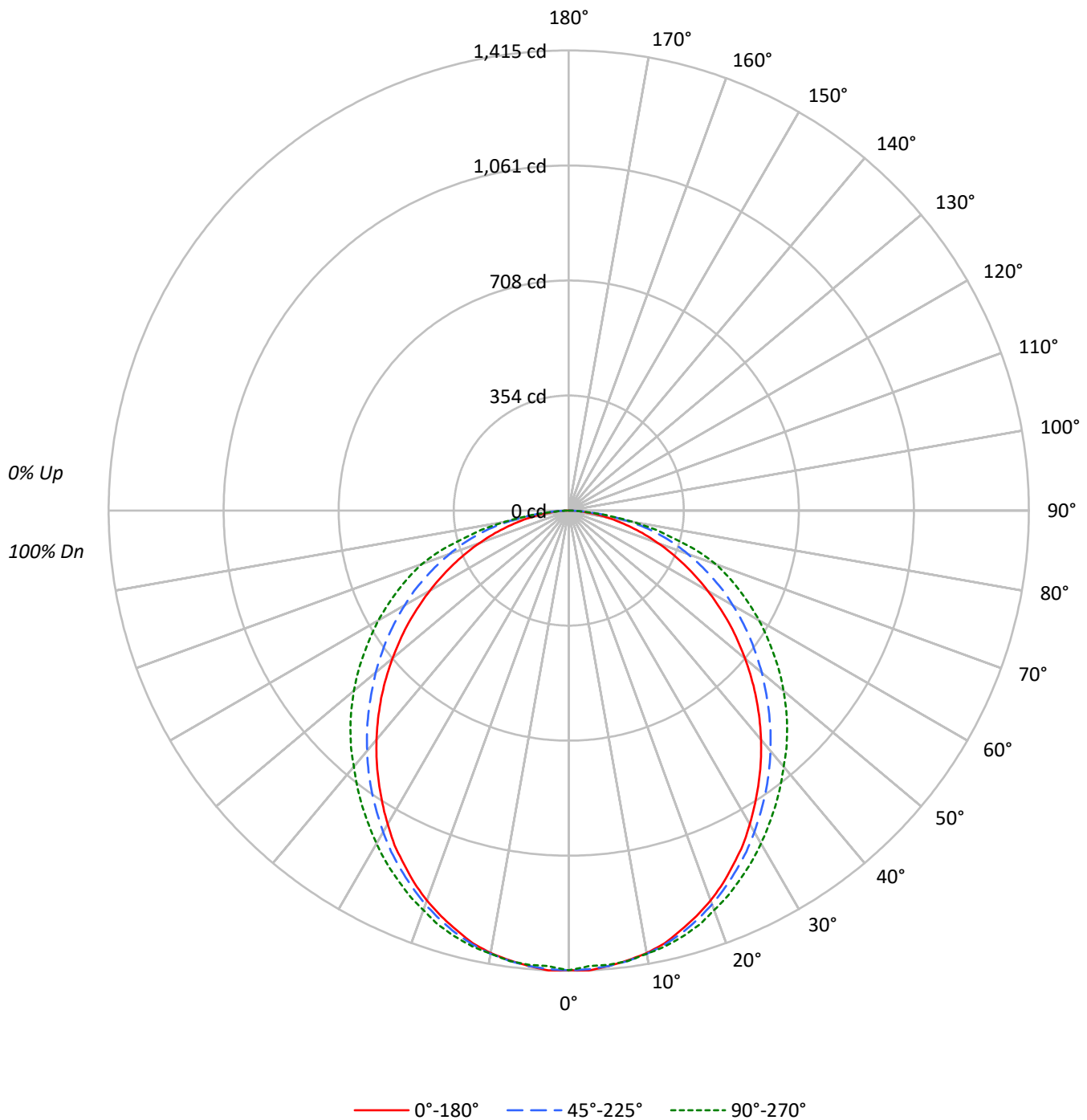
Input Watts (W): 34.9
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P230615

CATALOG NUMBER: 22CZ-LD5-39SE-S-UNV-L950-CD1-U

Luminous Intensity Polar Plot





TEST NUMBER: P230615

CATALOG NUMBER: 22CZ-LD5-39SE-S-UNV-L950-CD1-U

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20					20					20					20
RC	80				70					50					30					10
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100		
1	109	104	99	95	106	101	97	94	97	94	91	93	91	88	90	87	85	83		
2	99	90	83	77	96	88	82	77	85	79	75	81	77	73	78	75	71	69		
3	90	79	71	64	87	78	70	64	75	68	63	72	66	62	69	64	60	58		
4	82	70	61	54	80	69	61	54	66	59	53	64	58	53	62	56	52	50		
5	76	63	54	47	74	62	53	47	59	52	46	57	51	46	56	50	45	43		
6	70	56	47	41	68	56	47	41	54	46	40	52	45	40	50	44	40	38		
7	65	51	42	36	63	50	42	36	49	41	36	47	41	36	46	40	35	33		
8	60	47	38	32	59	46	38	32	45	37	32	43	37	32	42	36	32	30		
9	56	43	35	29	55	42	34	29	41	34	29	40	34	29	39	33	29	27		
10	53	40	32	26	52	39	32	26	38	31	26	37	31	26	36	30	26	24		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3803	3803	3803
5°	3798	3798	3788
10°	3775	3781	3781
15°	3720	3746	3777
20°	3653	3690	3744
25°	3561	3621	3710
30°	3460	3547	3674
35°	3346	3469	3640
40°	3231	3388	3611
45°	3104	3309	3614
50°	2962	3243	3610
55°	2822	3189	3608
60°	2656	3137	3638
65°	2490	3095	3687
70°	2301	3062	3780
75°	2072	3040	3505
80°	1818	2828	3059
85°	1494	2127	1899



TEST NUMBER: P230615

CATALOG NUMBER: 22CZ-LD5-39SE-S-UNV-L950-CD1-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	133.5	3.4
10°-20°	379.2	9.8
20°-30°	563.1	14.5
30°-40°	662.9	17.1
40°-50°	675.8	17.4
50°-60°	609.5	15.7
60°-70°	480.1	12.4
70°-80°	296.1	7.6
80°-90°	76.9	2.0
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°	1075.8	27.7
0°-40°	1738.6	44.8
0°-60°	3023.9	78.0
0°-90°	3877.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3877.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1413	1413	1413	1413	1413	
5°	1406	1408	1406	1404	1402	133
15°	1335	1341	1344	1352	1356	376
25°	1199	1207	1220	1240	1250	553
35°	1019	1030	1056	1089	1108	637
45°	816	829	870	922	950	629
55°	602	622	680	741	769	537
65°	391	419	486	548	579	387
75°	199	233	292	326	337	213
85°	48	62	69	65	62	57
90°	0	0	0	0	0	



TEST NUMBER: P230615

CATALOG NUMBER: 22CZ-LD5-39SE-S-UNV-L950-CD1-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1413.4	1413.4	1413.4	1413.4	1413.4
2.5°	1415.3	1415.3	1411.5	1407.8	1402.2
5°	1405.9	1407.8	1405.9	1404.1	1402.2
7.5°	1394.8	1396.6	1396.6	1396.6	1396.6
10°	1381.7	1383.6	1383.6	1383.6	1383.6
12.5°	1363.1	1365.0	1366.8	1368.7	1372.4
15°	1335.2	1340.8	1344.5	1351.9	1355.7
17.5°	1307.3	1312.8	1318.4	1327.7	1335.2
20°	1275.6	1279.3	1288.6	1299.8	1307.3
22.5°	1240.2	1245.8	1255.1	1270.0	1281.2
25°	1199.2	1206.7	1219.7	1240.2	1249.5
27.5°	1160.1	1165.7	1182.5	1204.8	1217.9
30°	1113.6	1121.0	1141.5	1169.5	1182.5
32.5°	1067.0	1076.3	1098.7	1130.3	1145.2
35°	1018.6	1029.8	1055.9	1089.4	1108.0
37.5°	970.2	981.4	1011.2	1048.4	1068.9
40°	919.9	931.1	964.6	1005.6	1027.9
42.5°	867.8	880.8	918.1	964.6	990.7
45°	815.6	828.7	869.6	921.8	949.7
47.5°	761.6	776.5	821.2	878.9	906.9
50°	707.6	724.4	774.7	834.3	862.2
52.5°	653.6	672.2	726.3	787.7	817.5
55°	601.5	622.0	679.7	741.1	769.1
57.5°	545.6	569.8	631.3	690.9	722.5
60°	493.5	519.5	582.9	642.5	676.0
62.5°	441.3	469.3	536.3	595.9	627.6
65°	391.1	419.0	486.0	547.5	579.1
67.5°	340.8	372.4	437.6	499.1	530.7
70°	292.4	325.9	389.2	448.8	480.4
72.5°	245.8	279.3	342.6	398.5	417.1
75°	199.3	232.8	292.4	325.9	337.1
77.5°	156.4	188.1	240.2	260.7	275.6
80°	117.3	145.3	182.5	195.5	197.4
82.5°	80.1	104.3	126.6	128.5	126.6
85°	48.4	61.5	68.9	65.2	61.5
87.5°	22.3	24.2	22.3	14.9	9.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)