

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: P230799

Luminaire Tested: **22CZ-LD5-20-SQP-UNV-L950-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P230799
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-LD5-20-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: 1383.0 lumens
Efficiency: N/A
Efficacy: 84.3 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

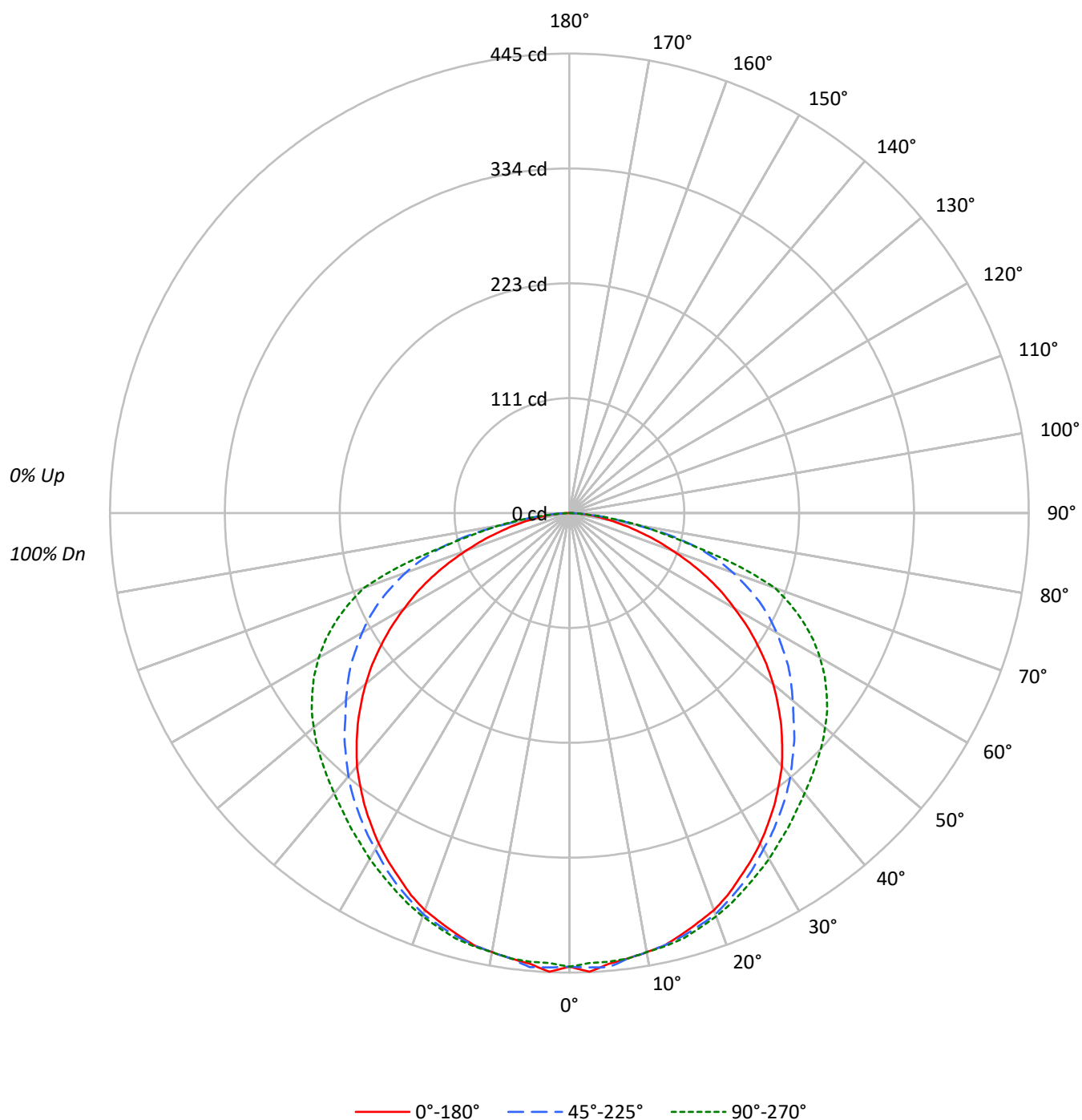
Input Watts (W): 16.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P230799

CATALOG NUMBER: 22CZ-LD5-20-SQP-UNV-L950-CD1-U

Luminous Intensity Polar Plot





TEST NUMBER: P230799

CATALOG NUMBER: 22CZ-LD5-20-SQP-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
RCR																				
0	119	119	119	119	116	116	116	116		111	111	111		106	106	106		102	102	102
1	108	103	99	95	105	101	97	93		97	93	90		93	90	87		89	87	85
2	98	89	82	76	95	87	81	75		84	78	73		80	76	71		77	73	70
3	89	78	69	62	86	76	68	62		73	66	61		70	64	59		68	63	58
4	81	68	59	52	79	67	58	52		64	57	51		62	56	50		60	54	50
5	74	61	52	45	72	60	51	44		58	50	44		56	49	43		54	48	43
6	68	55	45	39	66	54	45	39		52	44	38		50	43	38		48	42	37
7	63	49	40	34	62	49	40	34		47	39	34		45	39	33		44	38	33
8	59	45	36	30	57	44	36	30		43	35	30		42	35	30		40	34	29
9	55	41	33	27	54	41	33	27		39	32	27		38	32	27		37	31	27
10	51	38	30	24	50	37	30	24		36	29	24		35	29	24		35	28	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1182	1182	1182
5°	1184	1192	1178
10°	1180	1180	1180
15°	1176	1182	1188
20°	1172	1184	1190
25°	1158	1177	1193
30°	1148	1168	1202
35°	1136	1168	1217
40°	1124	1169	1245
45°	1104	1173	1292
50°	1079	1183	1353
55°	1043	1214	1426
60°	994	1249	1509
65°	937	1293	1593
70°	836	1327	1665
75°	726	1329	1317
80°	615	982	1065
85°	531	664	596



TEST NUMBER: P230799

CATALOG NUMBER: 22CZ-LD5-20-SQP-UNV-L950-CD1-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	41.7	3.0
10°-20°	119.8	8.7
20°-30°	182.5	13.2
30°-40°	223.3	16.1
40°-50°	240.3	17.4
50°-60°	232.8	16.8
60°-70°	197.2	14.3
70°-80°	119.2	8.6
80°-90°	26.2	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°	344.0	24.9
0°-40°	567.4	41.0
0°-60°	1040.4	75.2
0°-90°	1383.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1383.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	439	439	439	439	439	
5°	438	438	441	439	436	42
15°	422	423	424	425	426	119
25°	390	392	396	400	402	180
35°	346	348	356	365	370	216
45°	290	295	308	328	339	224
55°	222	232	259	289	304	199
65°	147	163	203	235	250	145
75°	70	94	128	130	127	75
85°	17	20	22	20	19	19
90°	0	0	0	0	0	



TEST NUMBER: P230799

CATALOG NUMBER: 22CZ-LD5-20-SQP-UNV-L950-CD1-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	439.3	439.3	439.3	439.3	439.3
2.5°	444.6	443.6	440.4	438.2	436.1
5°	438.2	438.2	441.4	439.3	436.1
7.5°	435.0	435.0	435.0	440.4	435.0
10°	431.8	432.8	431.8	436.1	431.8
12.5°	428.5	428.5	428.5	429.6	429.6
15°	422.1	423.2	424.2	425.3	426.4
17.5°	415.6	416.7	418.9	419.9	421.0
20°	409.2	410.3	413.5	413.5	415.6
22.5°	400.6	400.6	404.9	406.0	409.2
25°	389.9	392.0	396.3	399.5	401.7
27.5°	380.2	382.4	386.7	390.9	394.2
30°	369.5	371.6	375.9	382.4	386.7
32.5°	357.7	359.8	366.2	373.8	378.1
35°	345.8	348.0	355.5	365.2	370.5
37.5°	332.9	336.2	344.8	355.5	361.9
40°	320.1	323.3	332.9	344.8	354.4
42.5°	305.0	309.3	320.1	336.2	346.9
45°	290.0	295.4	308.2	327.6	339.4
47.5°	273.9	279.2	294.3	319.0	331.9
50°	257.8	264.2	282.5	309.3	323.3
52.5°	240.6	247.0	270.7	299.7	314.7
55°	222.3	232.0	258.8	288.9	304.0
57.5°	204.1	214.8	244.9	277.1	293.2
60°	184.7	197.6	232.0	264.2	280.3
62.5°	166.5	180.4	218.0	250.2	266.4
65°	147.1	163.3	203.0	235.2	250.2
67.5°	126.7	147.1	185.8	217.0	232.0
70°	106.3	130.0	168.6	197.6	211.6
72.5°	88.1	112.8	149.3	174.0	174.0
75°	69.8	94.5	127.8	130.0	126.7
77.5°	53.7	77.3	99.9	91.3	93.4
80°	39.7	59.1	63.4	66.6	68.7
82.5°	26.9	39.7	40.8	43.0	43.0
85°	17.2	20.4	21.5	20.4	19.3
87.5°	7.5	8.6	6.4	4.3	3.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)