

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: P230823

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P230823
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-LD5-20SE-SQP-UNV-L950-CD1-U
Description: CRUZE 2x2 LED TROFFER
WITH SQP LENS
Light Source: (56) 5000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1372.0 lumens
Efficiency: N/A
Efficacy: 79.8 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

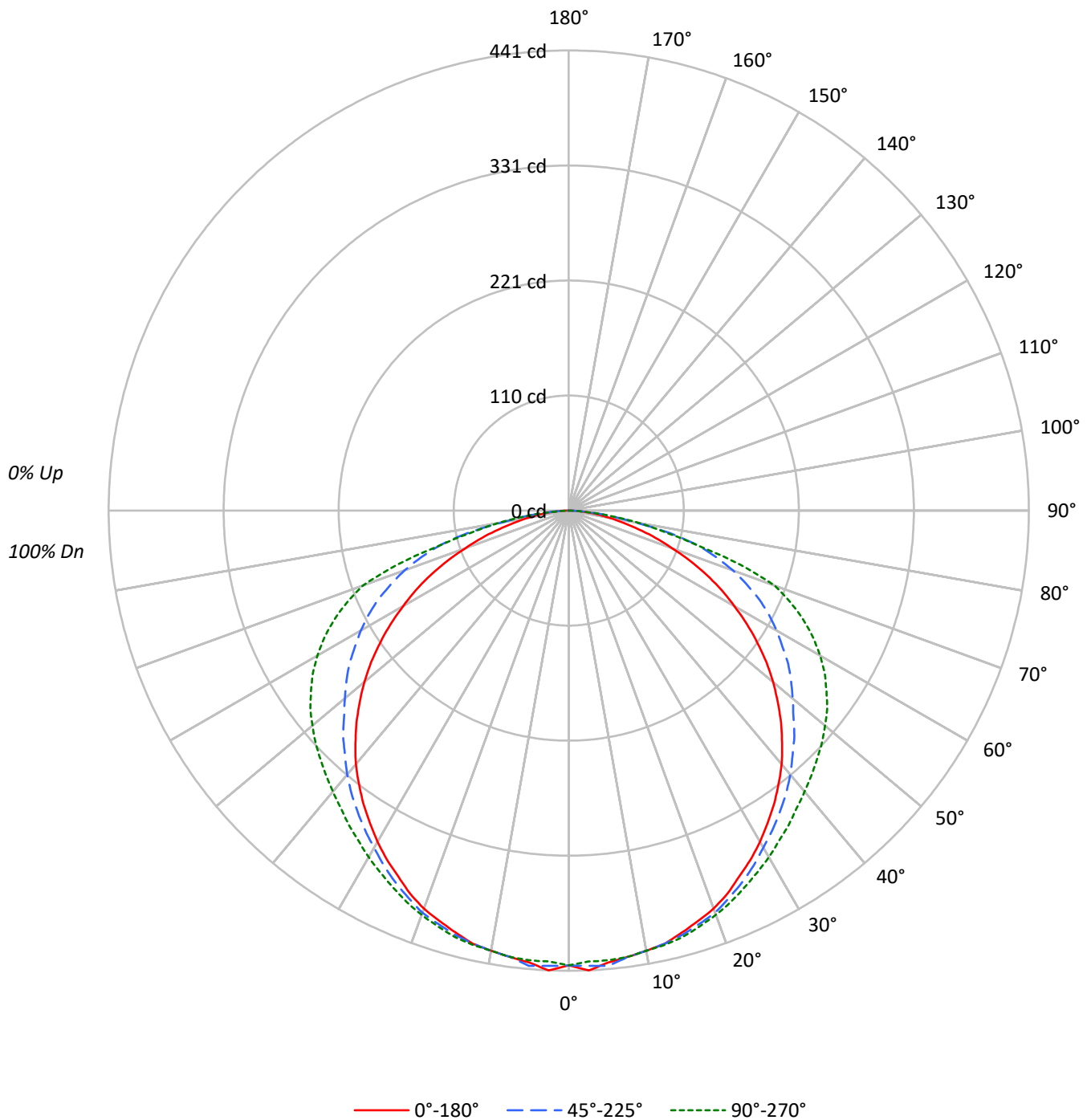
Input Watts (W): 17.2
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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
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°	1173	1173	1173
5°	1174	1183	1169
10°	1170	1170	1170
15°	1166	1173	1178
20°	1163	1175	1181
25°	1148	1167	1183
30°	1139	1159	1192
35°	1127	1159	1208
40°	1115	1160	1235
45°	1095	1164	1281
50°	1070	1173	1343
55°	1035	1205	1415
60°	987	1238	1497
65°	930	1282	1581
70°	830	1316	1651
75°	721	1318	1307
80°	611	975	1057
85°	525	658	593



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	41.4	3.0
10°-20°	118.8	8.7
20°-30°	181.1	13.2
30°-40°	221.6	16.1
40°-50°	238.4	17.4
50°-60°	230.9	16.8
60°-70°	195.6	14.3
70°-80°	118.3	8.6
80°-90°	26.0	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°	341.3	24.9
0°-40°	562.8	41.0
0°-60°	1032.2	75.2
0°-90°	1372.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1372.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	436	436	436	436	436	
5°	435	435	438	436	433	41
15°	419	420	421	422	423	118
25°	387	389	393	396	398	179
35°	343	345	353	362	368	215
45°	288	293	306	325	337	222
55°	221	230	257	287	302	197
65°	146	162	201	233	248	144
75°	69	94	127	129	126	74
85°	17	20	21	20	19	19
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	435.8	435.8	435.8	435.8	435.8
2.5°	441.1	440.0	436.8	434.7	432.6
5°	434.7	434.7	437.9	435.8	432.6
7.5°	431.5	431.5	431.5	436.8	431.5
10°	428.3	429.4	428.3	432.6	428.3
12.5°	425.1	425.1	425.1	426.2	426.2
15°	418.7	419.8	420.9	421.9	423.0
17.5°	412.3	413.4	415.5	416.6	417.7
20°	406.0	407.0	410.2	410.2	412.3
22.5°	397.4	397.4	401.7	402.8	406.0
25°	386.8	388.9	393.2	396.4	398.5
27.5°	377.2	379.3	383.6	387.8	391.0
30°	366.5	368.7	372.9	379.3	383.6
32.5°	354.8	356.9	363.3	370.8	375.1
35°	343.1	345.2	352.7	362.3	367.6
37.5°	330.3	333.5	342.0	352.7	359.1
40°	317.5	320.7	330.3	342.0	351.6
42.5°	302.6	306.9	317.5	333.5	344.2
45°	287.7	293.0	305.8	325.0	336.7
47.5°	271.7	277.0	291.9	316.4	329.2
50°	255.7	262.1	280.2	306.9	320.7
52.5°	238.7	245.1	268.5	297.3	312.2
55°	220.6	230.1	256.8	286.6	301.5
57.5°	202.4	213.1	242.9	274.9	290.9
60°	183.3	196.0	230.1	262.1	278.1
62.5°	165.2	179.0	216.3	248.3	264.2
65°	146.0	162.0	201.4	233.3	248.3
67.5°	125.7	146.0	184.3	215.2	230.1
70°	105.5	128.9	167.3	196.0	209.9
72.5°	87.4	111.9	148.1	172.6	172.6
75°	69.3	93.8	126.8	128.9	125.7
77.5°	53.3	76.7	99.1	90.6	92.7
80°	39.4	58.6	62.9	66.1	68.2
82.5°	26.6	39.4	40.5	42.6	42.6
85°	17.0	20.2	21.3	20.2	19.2
87.5°	7.5	8.5	6.4	4.3	3.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)