

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: P230798

Luminaire Tested: **22CZ-LD5-20-SQP-UNV-L940-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P230798
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-L940-CD1-U
Description: CRUZE 2x2 LED TROFFER
WITH SQP LENS
Light Source: (84) 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1271.0 lumens
Efficiency: N/A
Efficacy: 77.5 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

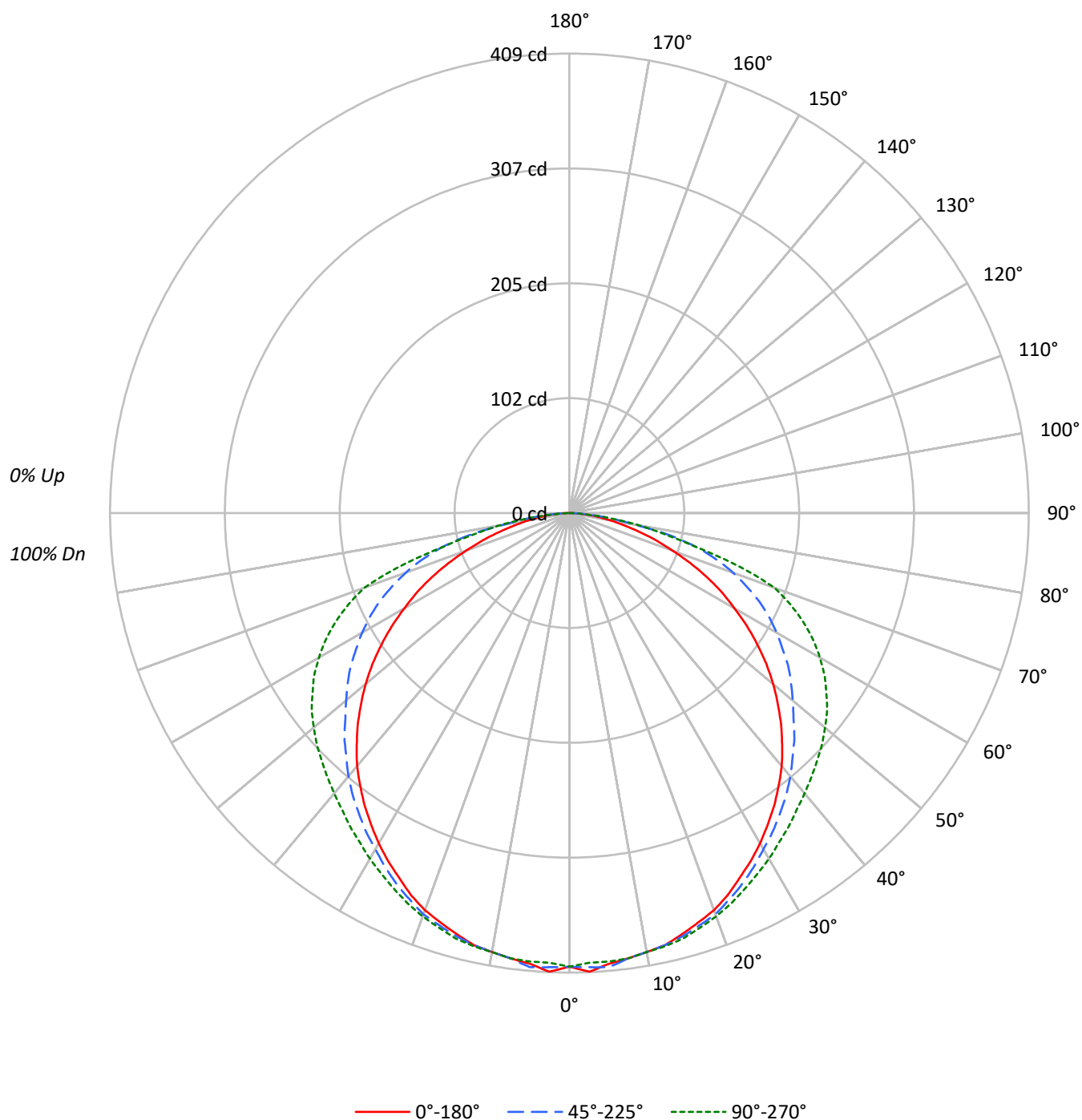
Input Watts (W): 16.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1086	1086	1086
5°	1088	1096	1082
10°	1084	1084	1084
15°	1081	1086	1092
20°	1077	1088	1094
25°	1064	1081	1096
30°	1055	1074	1104
35°	1044	1073	1119
40°	1033	1075	1144
45°	1014	1078	1187
50°	992	1087	1244
55°	958	1116	1310
60°	914	1147	1386
65°	861	1188	1465
70°	769	1220	1530
75°	667	1222	1211
80°	566	902	979
85°	488	608	550



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	38.3	3.0
10°-20°	110.1	8.7
20°-30°	167.7	13.2
30°-40°	205.2	16.1
40°-50°	220.8	17.4
50°-60°	213.9	16.8
60°-70°	181.2	14.3
70°-80°	109.5	8.6
80°-90°	24.1	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°	316.2	24.9
0°-40°	521.4	41.0
0°-60°	956.2	75.2
0°-90°	1271.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1271.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	404	404	404	404	404	
5°	403	403	406	404	401	38
15°	388	389	390	391	392	110
25°	358	360	364	367	369	165
35°	318	320	327	336	340	199
45°	266	271	283	301	312	205
55°	204	213	238	266	279	183
65°	135	150	187	216	230	133
75°	64	87	118	119	116	69
85°	16	19	20	19	18	18
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	403.7	403.7	403.7	403.7	403.7
2.5°	408.6	407.7	404.7	402.7	400.7
5°	402.7	402.7	405.7	403.7	400.7
7.5°	399.8	399.8	399.8	404.7	399.8
10°	396.8	397.8	396.8	400.7	396.8
12.5°	393.8	393.8	393.8	394.8	394.8
15°	387.9	388.9	389.9	390.9	391.9
17.5°	382.0	383.0	384.9	385.9	386.9
20°	376.1	377.1	380.0	380.0	382.0
22.5°	368.2	368.2	372.1	373.1	376.1
25°	358.3	360.3	364.2	367.2	369.2
27.5°	349.4	351.4	355.3	359.3	362.2
30°	339.5	341.5	345.5	351.4	355.3
32.5°	328.7	330.7	336.6	343.5	347.4
35°	317.8	319.8	326.7	335.6	340.5
37.5°	306.0	308.9	316.8	326.7	332.6
40°	294.1	297.1	306.0	316.8	325.7
42.5°	280.3	284.3	294.1	308.9	318.8
45°	266.5	271.4	283.3	301.1	311.9
47.5°	251.7	256.6	270.5	293.2	305.0
50°	236.9	242.8	259.6	284.3	297.1
52.5°	221.1	227.0	248.7	275.4	289.2
55°	204.3	213.2	237.9	265.5	279.3
57.5°	187.5	197.4	225.0	254.7	269.5
60°	169.8	181.6	213.2	242.8	257.6
62.5°	153.0	165.8	200.4	230.0	244.8
65°	135.2	150.0	186.6	216.2	230.0
67.5°	116.5	135.2	170.8	199.4	213.2
70°	97.7	119.4	155.0	181.6	194.4
72.5°	80.9	103.6	137.2	159.9	159.9
75°	64.2	86.9	117.5	119.4	116.5
77.5°	49.4	71.1	91.8	83.9	85.9
80°	36.5	54.3	58.2	61.2	63.2
82.5°	24.7	36.5	37.5	39.5	39.5
85°	15.8	18.8	19.7	18.8	17.8
87.5°	6.9	7.9	5.9	3.9	3.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)