

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: P230796

Luminaire Tested: **22CZ-LD5-20-SQP-UNV-L930-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P230796
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-L930-CD1-U
Description: CRUZE 2x2 LED TROFFER
WITH SQP LENS
Light Source: (84) 3000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1194.0 lumens
Efficiency: N/A
Efficacy: 72.8 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

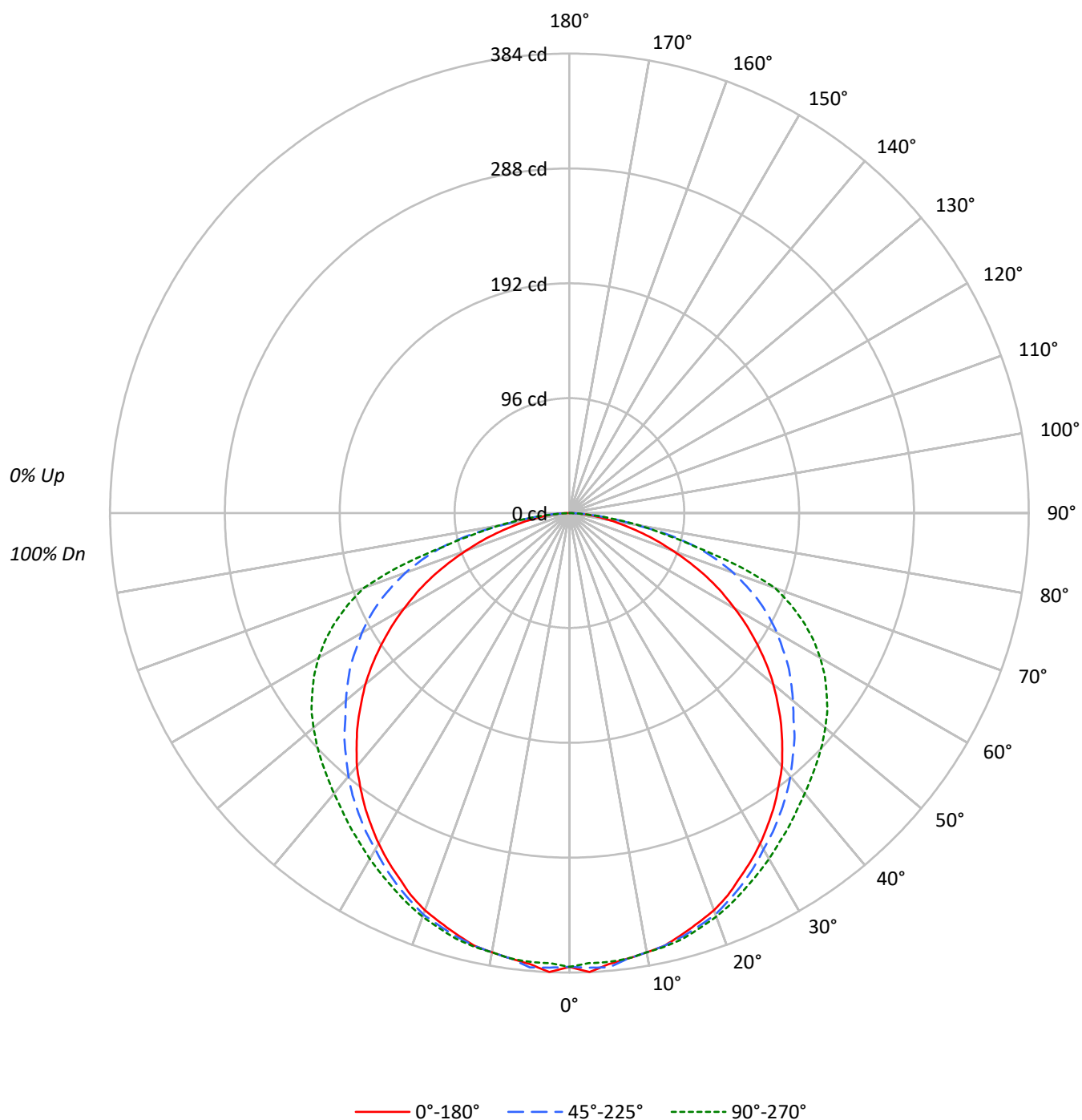
Input Watts (W): 16.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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				0
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°	1020	1020	1020
5°	1022	1029	1017
10°	1019	1019	1019
15°	1015	1020	1025
20°	1012	1022	1027
25°	999	1016	1030
30°	991	1008	1037
35°	981	1008	1051
40°	971	1010	1075
45°	953	1013	1115
50°	931	1021	1168
55°	900	1049	1231
60°	858	1078	1302
65°	809	1116	1375
70°	722	1146	1437
75°	627	1147	1137
80°	532	848	919
85°	457	571	516



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	36.0	3.0
10°-20°	103.4	8.7
20°-30°	157.6	13.2
30°-40°	192.8	16.1
40°-50°	207.5	17.4
50°-60°	201.0	16.8
60°-70°	170.2	14.3
70°-80°	102.9	8.6
80°-90°	22.6	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°	297.0	24.9
0°-40°	489.8	41.0
0°-60°	898.2	75.2
0°-90°	1194.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1194.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	379	379	379	379	379	
5°	378	378	381	379	376	36
15°	364	365	366	367	368	103
25°	337	338	342	345	347	155
35°	299	300	307	315	320	187
45°	250	255	266	283	293	193
55°	192	200	224	249	262	171
65°	127	141	175	203	216	125
75°	60	82	110	112	109	65
85°	15	18	18	18	17	17
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	379.2	379.2	379.2	379.2	379.2
2.5°	383.9	383.0	380.2	378.3	376.5
5°	378.3	378.3	381.1	379.2	376.5
7.5°	375.5	375.5	375.5	380.2	375.5
10°	372.8	373.7	372.8	376.5	372.8
12.5°	370.0	370.0	370.0	370.9	370.9
15°	364.4	365.3	366.3	367.2	368.1
17.5°	358.8	359.8	361.6	362.6	363.5
20°	353.3	354.2	357.0	357.0	358.8
22.5°	345.9	345.9	349.6	350.5	353.3
25°	336.6	338.4	342.2	344.9	346.8
27.5°	328.2	330.1	333.8	337.5	340.3
30°	319.0	320.8	324.5	330.1	333.8
32.5°	308.8	310.6	316.2	322.7	326.4
35°	298.6	300.4	306.9	315.3	319.9
37.5°	287.4	290.2	297.6	306.9	312.5
40°	276.3	279.1	287.4	297.6	306.0
42.5°	263.3	267.0	276.3	290.2	299.5
45°	250.4	255.0	266.1	282.8	293.0
47.5°	236.4	241.1	254.1	275.4	286.5
50°	222.5	228.1	243.9	267.0	279.1
52.5°	207.7	213.3	233.7	258.7	271.7
55°	191.9	200.3	223.5	249.4	262.4
57.5°	176.2	185.5	211.4	239.2	253.1
60°	159.5	170.6	200.3	228.1	242.0
62.5°	143.7	155.8	188.2	216.0	230.0
65°	127.0	140.9	175.3	203.1	216.0
67.5°	109.4	127.0	160.4	187.3	200.3
70°	91.8	112.2	145.6	170.6	182.7
72.5°	76.0	97.4	128.9	150.2	150.2
75°	60.3	81.6	110.3	112.2	109.4
77.5°	46.4	66.8	86.2	78.8	80.7
80°	34.3	51.0	54.7	57.5	59.3
82.5°	23.2	34.3	35.2	37.1	37.1
85°	14.8	17.6	18.5	17.6	16.7
87.5°	6.5	7.4	5.6	3.7	2.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)