

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: P230878

Luminaire Tested: **22CZ-LD5-39SE-RDP-UNV-L940-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P230878
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P25714)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ-LD5-39SE-RDP-UNV-L940-CD1-U
Description: CRUZE 2x2 LED TROFFER
WITH RDP LENS
Light Source: (56) 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2301.0 lumens
Efficiency: N/A
Efficacy: 65.9 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.28 / 1.36
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

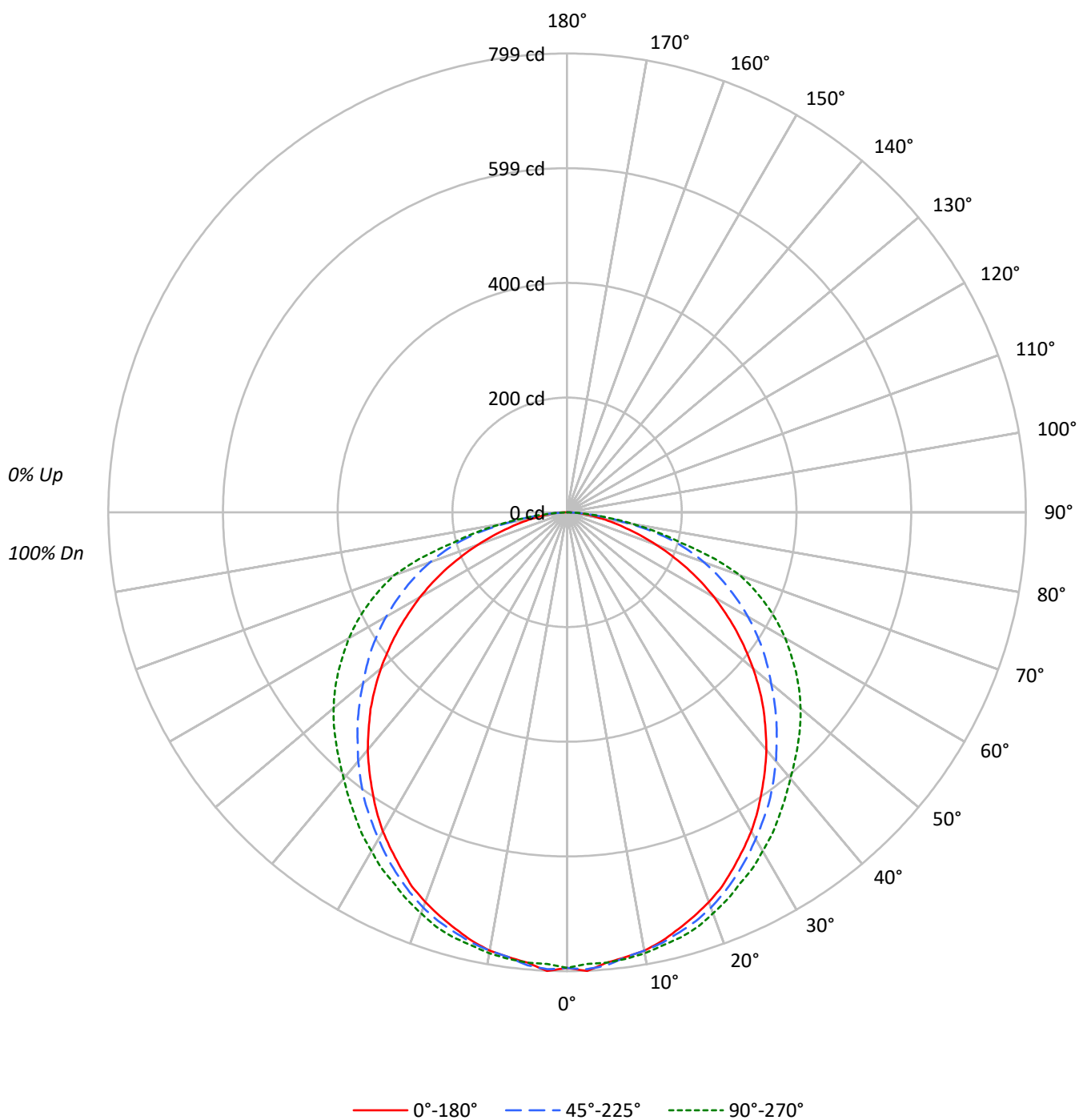
Input Watts (W): 34.9
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	104	99	95	106	101	97	94		97	94	91		93	90	88		89	87	85
2	98	90	83	77	96	88	81	76		84	79	74		81	77	73		78	74	71
3	89	79	70	64	87	77	69	63		74	67	62		71	66	61		69	64	60
4	82	69	60	54	79	68	60	53		66	58	52		63	57	52		61	56	51
5	75	62	53	46	73	61	52	46		59	51	45		57	50	45		55	49	44
6	69	56	47	40	67	55	46	40		53	45	40		51	44	39		50	44	39
7	64	50	42	35	62	50	41	35		48	40	35		47	40	35		45	39	34
8	60	46	37	31	58	45	37	31		44	37	31		43	36	31		42	35	31
9	56	42	34	28	54	42	34	28		40	33	28		39	33	28		38	32	28
10	52	39	31	26	51	38	31	26		37	30	25		36	30	25		36	30	25

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2135	2135	2135
5°	2126	2139	2126
10°	2118	2118	2130
15°	2092	2109	2134
20°	2068	2098	2128
25°	2031	2072	2117
30°	1994	2041	2116
35°	1943	2018	2118
40°	1897	1988	2126
45°	1842	1963	2165
50°	1772	1943	2223
55°	1687	1950	2284
60°	1592	1959	2359
65°	1468	1970	2444
70°	1301	1993	2518
75°	1104	1987	2145
80°	917	1598	1787
85°	797	1078	1031



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	75.0	3.3
10°-20°	213.8	9.3
20°-30°	321.6	14.0
30°-40°	385.4	16.8
40°-50°	402.0	17.5
50°-60°	374.2	16.3
60°-70°	303.9	13.2
70°-80°	183.1	8.0
80°-90°	42.0	1.8
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°	610.4	26.5
0°-40°	995.8	43.3
0°-60°	1772.0	77.0
0°-90°	2301.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2301.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	793	793	793	793	793	
5°	787	787	792	793	787	75
15°	751	754	757	761	766	212
25°	684	689	698	707	713	315
35°	592	599	614	632	645	370
45°	484	493	516	549	569	372
55°	360	375	416	461	487	321
65°	231	255	309	358	384	228
75°	106	141	191	203	206	115
85°	26	32	35	33	33	30
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	793.3	793.3	793.3	793.3	793.3
2.5°	799.4	797.8	796.3	791.8	787.2
5°	787.2	787.2	791.8	793.3	787.2
7.5°	781.2	781.2	781.2	787.2	784.2
10°	775.1	775.1	775.1	779.6	779.6
12.5°	764.5	766.0	767.5	769.0	772.1
15°	750.8	753.9	756.9	761.4	766.0
17.5°	737.2	740.2	746.3	750.8	756.9
20°	722.0	725.0	732.6	737.2	743.2
22.5°	705.3	706.8	715.9	722.0	729.6
25°	684.1	688.6	697.7	706.8	712.9
27.5°	662.9	667.4	678.0	690.2	699.3
30°	641.6	646.2	656.8	672.0	681.1
32.5°	617.3	623.4	635.5	653.8	664.4
35°	591.6	599.1	614.3	632.5	644.6
37.5°	565.8	573.4	590.0	612.8	624.9
40°	540.0	547.6	565.8	590.0	605.2
42.5°	511.2	520.3	540.0	568.8	587.0
45°	483.9	493.0	515.7	549.1	568.8
47.5°	453.5	464.1	489.9	527.9	550.6
50°	423.2	435.3	464.1	506.6	530.9
52.5°	391.3	405.0	439.9	483.9	509.7
55°	359.5	374.7	415.6	461.1	486.9
57.5°	327.6	344.3	389.8	436.8	462.6
60°	295.8	314.0	364.0	412.6	438.4
62.5°	263.9	283.6	336.7	385.3	412.6
65°	230.6	254.8	309.4	358.0	383.8
67.5°	197.2	226.0	282.1	329.2	353.4
70°	165.3	197.2	253.3	297.3	320.0
72.5°	135.0	168.4	223.0	260.9	270.0
75°	106.2	141.1	191.1	203.3	206.3
77.5°	81.9	113.8	151.7	154.7	162.3
80°	59.2	86.5	103.1	112.2	115.3
82.5°	41.0	59.2	68.3	69.8	71.3
85°	25.8	31.9	34.9	33.4	33.4
87.5°	13.7	12.1	10.6	7.6	6.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)