

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: P230609

Luminaire Tested: **22CZ-LD5-32SE-S-UNV-L935-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P230609
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P25712)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ-LD5-32SE-S-UNV-L935-CD1-U
Description: CRUZE 2x2 LED TROFFER
WITH SMOOTH LENS
Light Source: (56) 3500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2813.0 lumens
Efficiency: N/A
Efficacy: 92.2 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 1.24 / 1.33
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

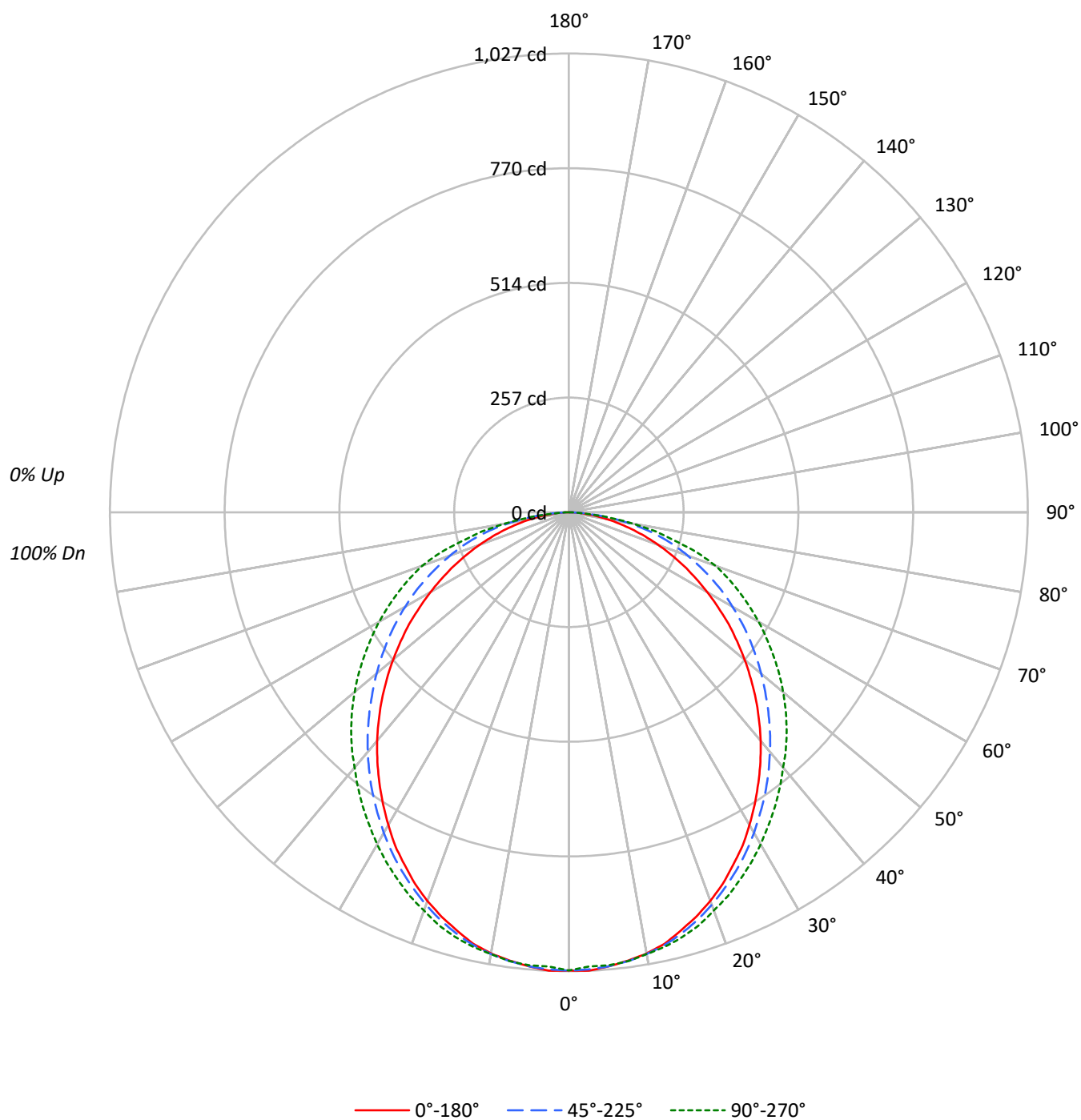
Input Watts (W): 30.5
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	109	104	99	95	106	101	97	94		97	94	91		93	91	88		90	87	85
2	99	90	83	77	96	88	82	77		85	79	75		81	77	73		78	75	71
3	90	79	71	64	87	78	70	64		75	68	63		72	66	62		69	64	60
4	82	70	61	54	80	69	61	54		66	59	53		64	58	53		62	56	52
5	76	63	54	47	74	62	53	47		59	52	46		57	51	46		56	50	45
6	70	56	47	41	68	56	47	41		54	46	40		52	45	40		50	44	40
7	65	51	42	36	63	50	42	36		49	41	36		47	41	36		46	40	35
8	60	47	38	32	59	46	38	32		45	37	32		43	37	32		42	36	32
9	56	43	35	29	55	42	34	29		41	34	29		40	34	29		39	33	29
10	53	40	32	26	52	39	32	26		38	31	26		37	31	26		36	30	26

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2760	2760	2760
5°	2756	2756	2748
10°	2739	2743	2743
15°	2699	2718	2740
20°	2650	2678	2716
25°	2583	2628	2692
30°	2511	2573	2666
35°	2428	2517	2641
40°	2345	2459	2620
45°	2252	2401	2622
50°	2149	2353	2619
55°	2047	2314	2618
60°	1927	2276	2640
65°	1806	2245	2676
70°	1669	2222	2743
75°	1503	2205	2543
80°	1319	2052	2219
85°	1084	1544	1377



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	96.8	3.4
10°-20°	275.1	9.8
20°-30°	408.6	14.5
30°-40°	481.0	17.1
40°-50°	490.3	17.4
50°-60°	442.2	15.7
60°-70°	348.3	12.4
70°-80°	214.9	7.6
80°-90°	55.8	2.0
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°	780.5	27.7
0°-40°	1261.5	44.8
0°-60°	2194.0	78.0
0°-90°	2813.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2813.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1026	1026	1026	1026	1026	
5°	1020	1022	1020	1019	1017	97
15°	969	973	976	981	984	273
25°	870	876	885	900	907	401
35°	739	747	766	790	804	462
45°	592	601	631	669	689	456
55°	436	451	493	538	558	389
65°	284	304	353	397	420	281
75°	145	169	212	236	245	154
85°	35	45	50	47	45	41
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1025.5	1025.5	1025.5	1025.5	1025.5
2.5°	1026.9	1026.9	1024.2	1021.5	1017.4
5°	1020.1	1021.5	1020.1	1018.7	1017.4
7.5°	1012.0	1013.3	1013.3	1013.3	1013.3
10°	1002.5	1003.9	1003.9	1003.9	1003.9
12.5°	989.0	990.4	991.7	993.1	995.8
15°	968.8	972.8	975.5	980.9	983.6
17.5°	948.5	952.5	956.6	963.4	968.8
20°	925.5	928.2	935.0	943.1	948.5
22.5°	899.9	903.9	910.7	921.5	929.6
25°	870.1	875.5	885.0	899.9	906.6
27.5°	841.8	845.8	858.0	874.2	883.6
30°	808.0	813.4	828.2	848.5	858.0
32.5°	774.2	781.0	797.2	820.1	830.9
35°	739.1	747.2	766.1	790.4	803.9
37.5°	703.9	712.0	733.7	760.7	775.5
40°	667.5	675.6	699.9	729.6	745.8
42.5°	629.6	639.1	666.1	699.9	718.8
45°	591.8	601.3	631.0	668.8	689.1
47.5°	552.6	563.4	595.8	637.7	658.0
50°	513.4	525.6	562.1	605.3	625.6
52.5°	474.2	487.8	526.9	571.5	593.1
55°	436.4	451.3	493.2	537.7	558.0
57.5°	395.9	413.4	458.0	501.3	524.2
60°	358.0	377.0	422.9	466.1	490.5
62.5°	320.2	340.5	389.1	432.4	455.3
65°	283.7	304.0	352.6	397.2	420.2
67.5°	247.3	270.2	317.5	362.1	385.1
70°	212.1	236.4	282.4	325.6	348.6
72.5°	178.3	202.7	248.6	289.1	302.7
75°	144.6	168.9	212.1	236.4	244.6
77.5°	113.5	136.5	174.3	189.2	200.0
80°	85.1	105.4	132.4	141.9	143.2
82.5°	58.1	75.7	91.9	93.2	91.9
85°	35.1	44.6	50.0	47.3	44.6
87.5°	16.2	17.6	16.2	10.8	6.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)