

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: P230587

Luminaire Tested: **22CZ-LD5-29-S-UNV-L950-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P230587
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-LD5-29-S-UNV-L950-CD1-U
Description: CRUZE 2x2 LED TROFFER
WITH SMOOTH LENS
Light Source: (84) 5000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2838.0 lumens
Efficiency: N/A
Efficacy: 120.8 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

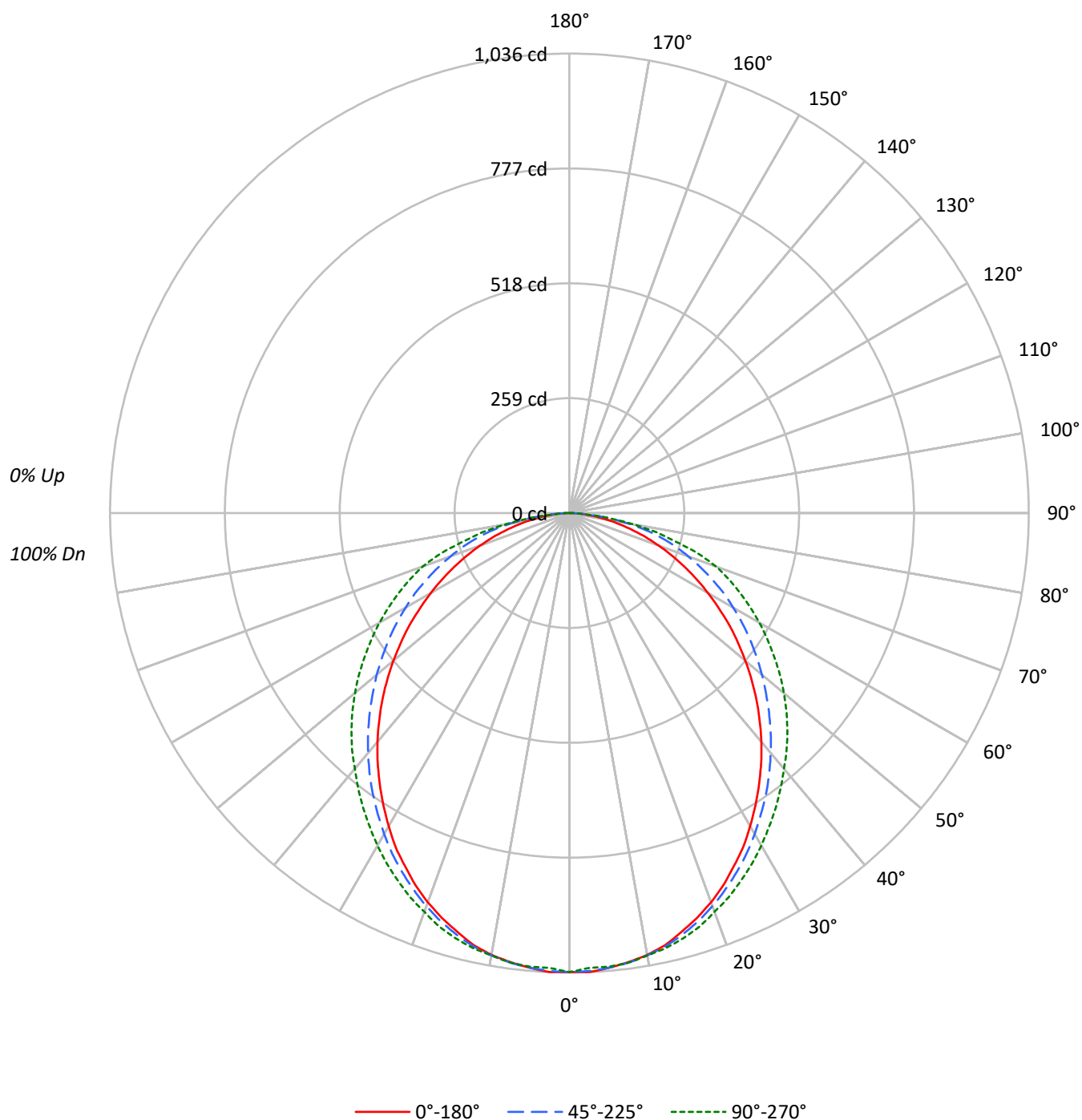
Input Watts (W): 23.5
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2784	2784	2784
5°	2780	2780	2773
10°	2764	2767	2767
15°	2723	2742	2765
20°	2674	2701	2740
25°	2607	2651	2716
30°	2533	2596	2690
35°	2449	2539	2665
40°	2366	2480	2643
45°	2272	2423	2646
50°	2169	2374	2642
55°	2066	2334	2641
60°	1944	2296	2663
65°	1823	2266	2699
70°	1684	2242	2767
75°	1517	2225	2565
80°	1331	2070	2239
85°	1093	1556	1389



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	97.7	3.4
10°-20°	277.5	9.8
20°-30°	412.2	14.5
30°-40°	485.2	17.1
40°-50°	494.7	17.4
50°-60°	446.1	15.7
60°-70°	351.4	12.4
70°-80°	216.8	7.6
80°-90°	56.3	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°	787.5	27.7
0°-40°	1272.7	44.8
0°-60°	2213.5	78.0
0°-90°	2838.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2838.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1035	1035	1035	1035	1035	
5°	1029	1030	1029	1028	1026	98
15°	977	982	984	990	992	276
25°	878	883	893	908	915	404
35°	746	754	773	797	811	466
45°	597	607	637	675	695	460
55°	440	455	498	542	563	393
65°	286	307	356	401	424	284
75°	146	170	214	238	247	156
85°	35	45	50	48	45	42
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1034.6	1034.6	1034.6	1034.6	1034.6
2.5°	1036.0	1036.0	1033.3	1030.5	1026.4
5°	1029.2	1030.5	1029.2	1027.8	1026.4
7.5°	1021.0	1022.4	1022.4	1022.4	1022.4
10°	1011.4	1012.8	1012.8	1012.8	1012.8
12.5°	997.8	999.2	1000.5	1001.9	1004.6
15°	977.4	981.5	984.2	989.6	992.4
17.5°	956.9	961.0	965.1	971.9	977.4
20°	933.7	936.5	943.3	951.5	956.9
22.5°	907.8	911.9	918.8	929.7	937.8
25°	877.9	883.3	892.9	907.8	914.7
27.5°	849.2	853.3	865.6	881.9	891.5
30°	815.2	820.6	835.6	856.0	865.6
32.5°	781.1	787.9	804.2	827.4	838.3
35°	745.6	753.8	772.9	797.4	811.1
37.5°	710.2	718.4	740.2	767.4	782.4
40°	673.4	681.6	706.1	736.1	752.5
42.5°	635.2	644.8	672.0	706.1	725.2
45°	597.1	606.6	636.6	674.8	695.2
47.5°	557.5	568.4	601.1	643.4	663.8
50°	518.0	530.3	567.1	610.7	631.1
52.5°	478.5	492.1	531.6	576.6	598.4
55°	440.3	455.3	497.5	542.5	563.0
57.5°	399.4	417.1	462.1	505.7	528.9
60°	361.2	380.3	426.7	470.3	494.8
62.5°	323.1	343.5	392.6	436.2	459.4
65°	286.3	306.7	355.8	400.8	423.9
67.5°	249.5	272.6	320.3	365.3	388.5
70°	214.0	238.5	284.9	328.5	351.7
72.5°	179.9	204.5	250.8	291.7	305.3
75°	145.9	170.4	214.0	238.5	246.7
77.5°	114.5	137.7	175.8	190.8	201.7
80°	85.9	106.3	133.6	143.1	144.5
82.5°	58.6	76.3	92.7	94.1	92.7
85°	35.4	45.0	50.4	47.7	45.0
87.5°	16.4	17.7	16.4	10.9	6.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)